

## Appendix IV

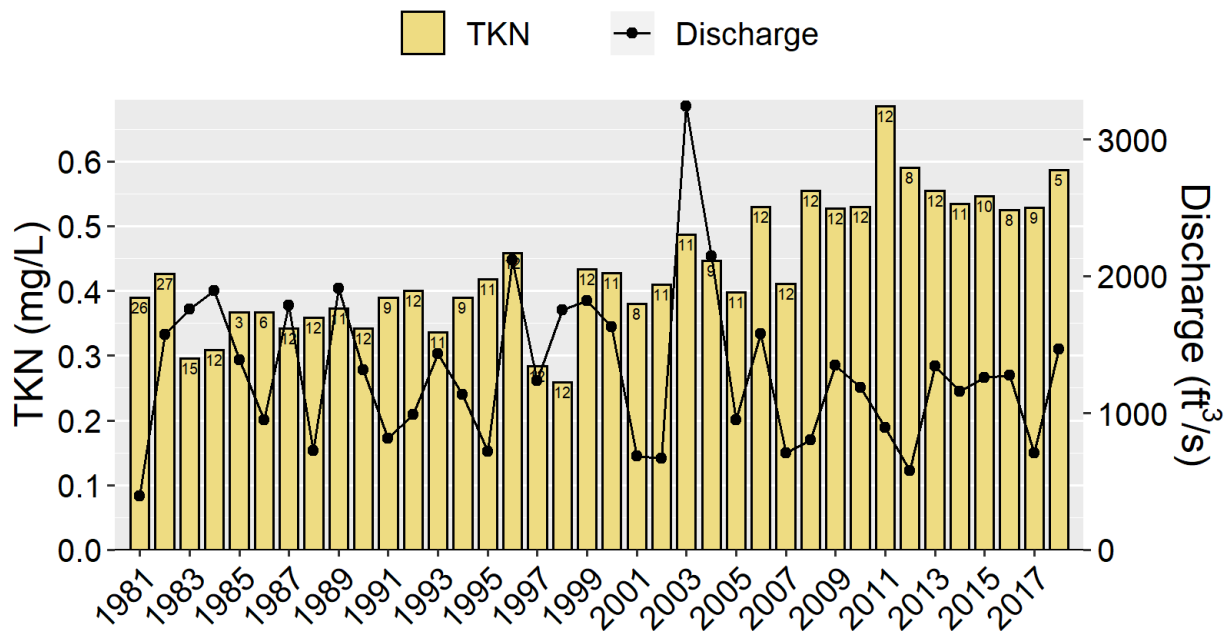
### Weight-Average Methodology

The reasoning behind this methodology is that the earlier years of monitoring collected multiple samples within a single day, multiple samples within a single month on an irregular basis. This differs from the current sampling regime which collects one sample per month. The intent of this method was to have a historical distribution of samples that matched the current sampling regime. We maintained this methodology throughout the report. The annual means for the water quality parameters presented in appendix III, appendix IV, chapter 2, chapter 4, and chapter 5 were calculated using monthly averages which were based on daily average values. First, the average daily values were calculated for each water quality parameter, then the monthly average values were calculated from the daily average values. These average monthly values were then used to calculate the yearly means. The five-year means and 2010 – 2018 means presented in Chapter 5 were calculated using a similar methodology using the yearly average values to calculate the five year means.

*NOTTOWAY RIVER AT US 258 NEAR RIVERDALE VA Ambient Monitoring Station Water Quality Data with the Number of Samples Collected inside the Bar, Annual Weighted Means, and Annual Median values with the Nottoway River Discharge (USGS Gage: 02047000).*

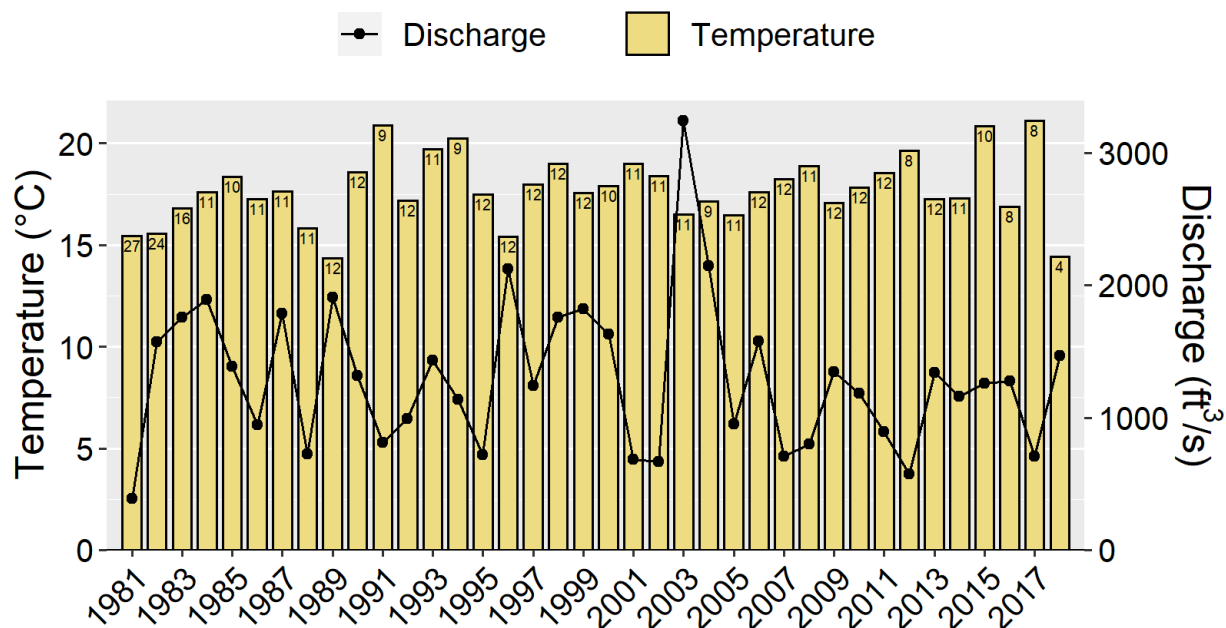
D0000050

Yearly Average Values



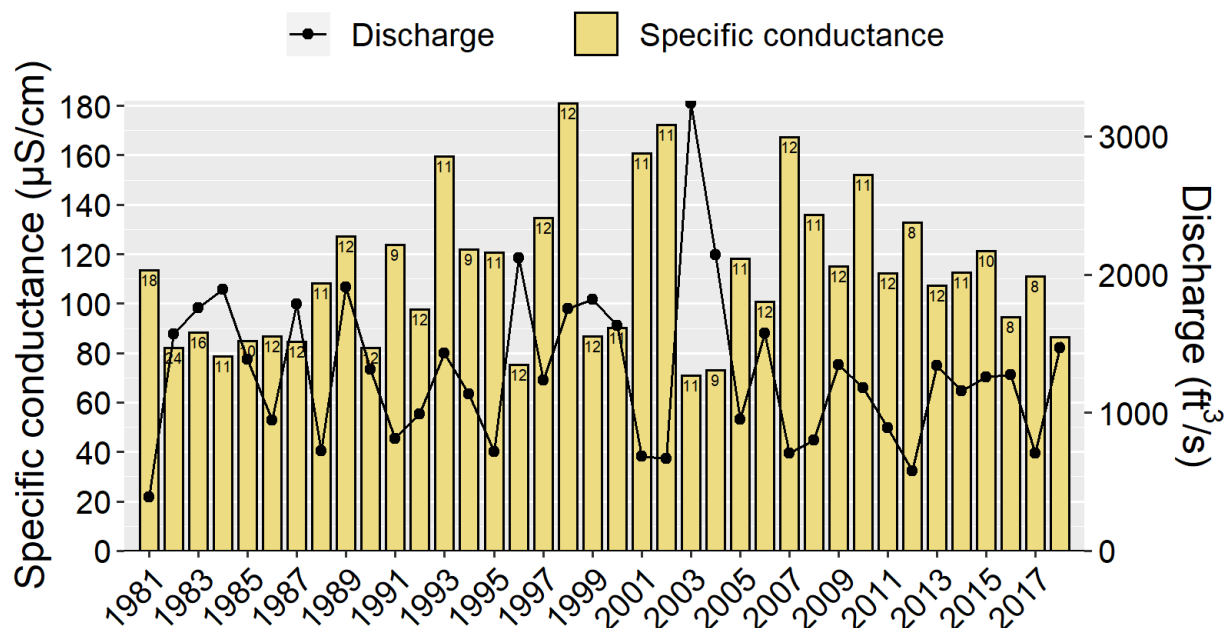
D0000050

Yearly Average Values



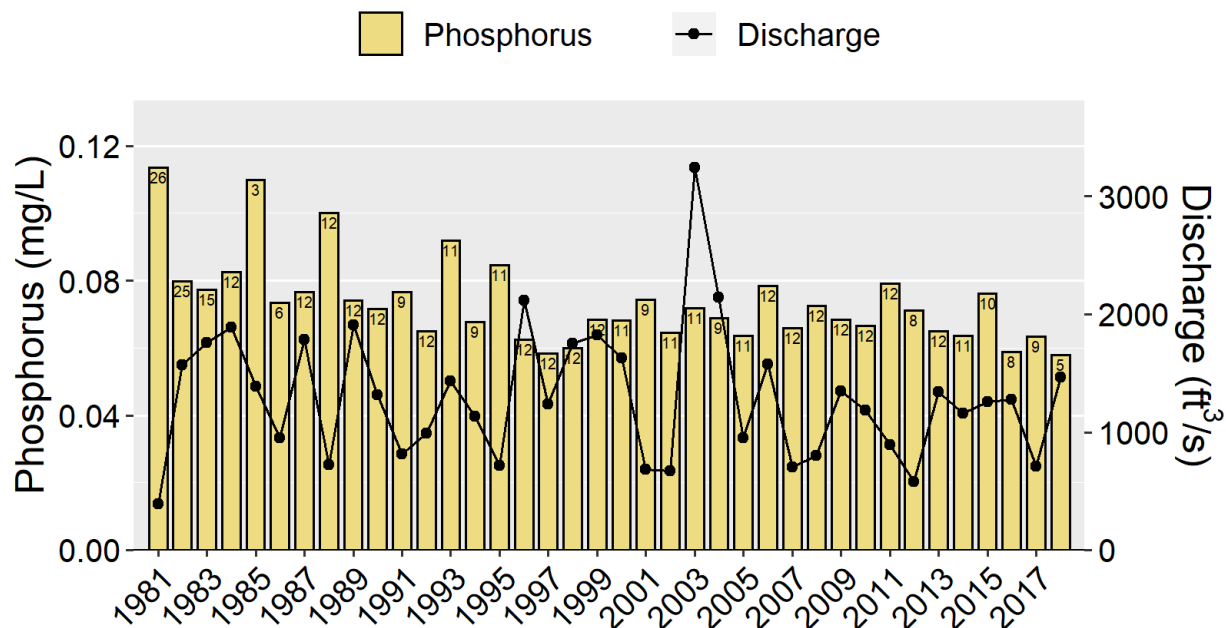
D0000050

Yearly Average Values



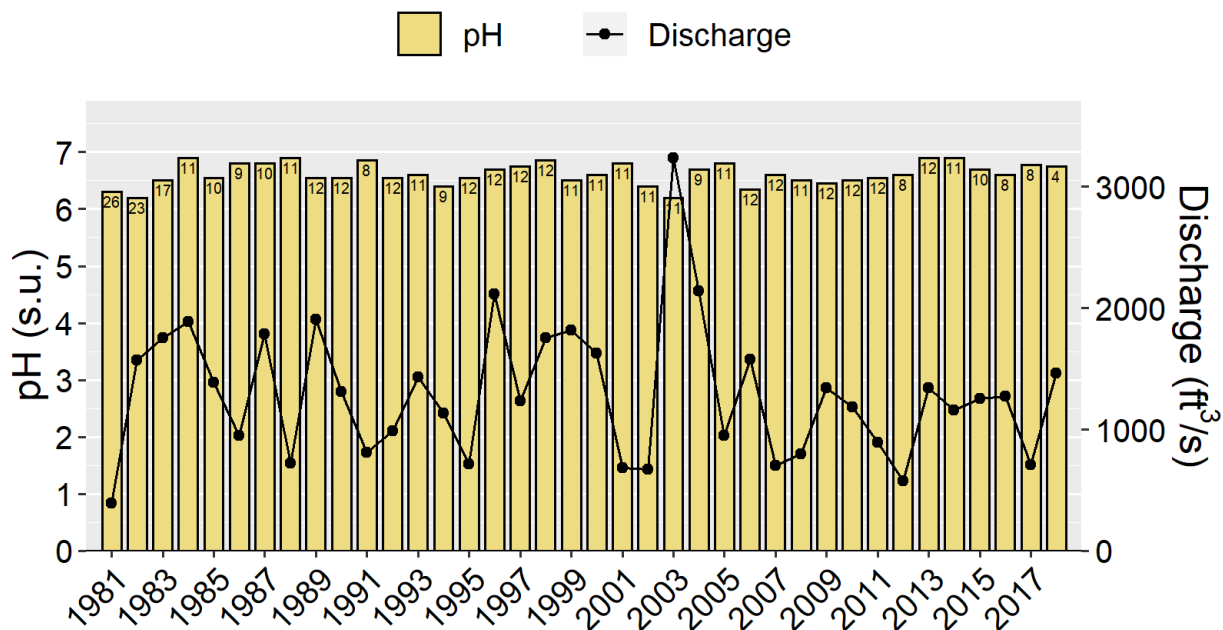
D0000050

Yearly Average Values



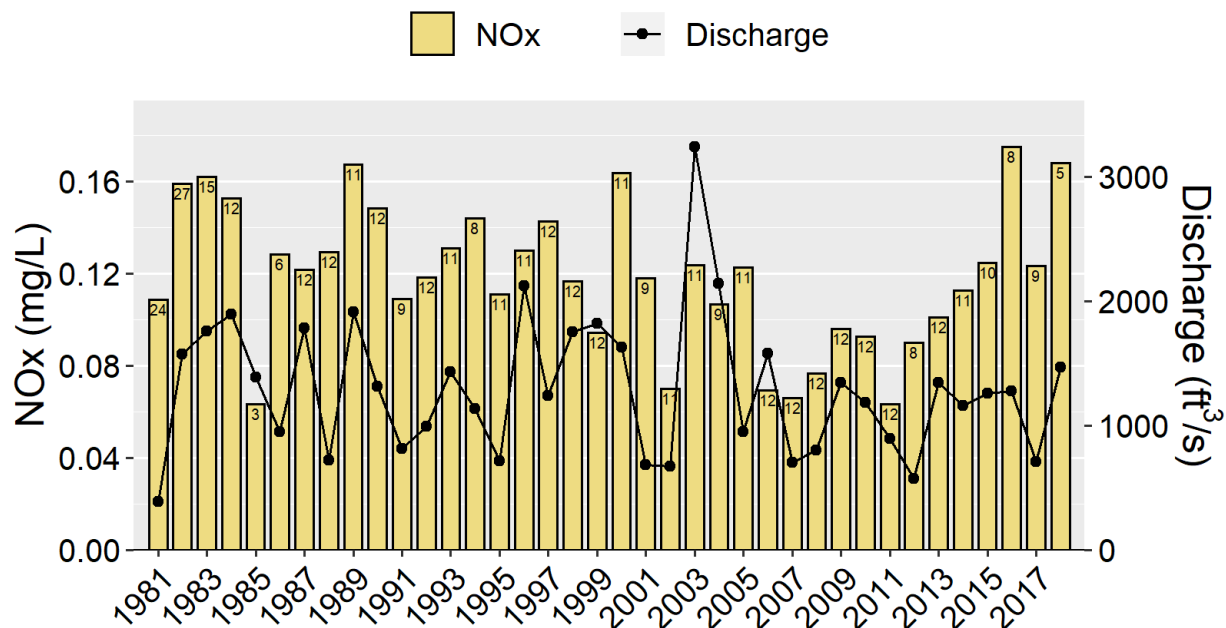
D0000050

Yearly Median Values



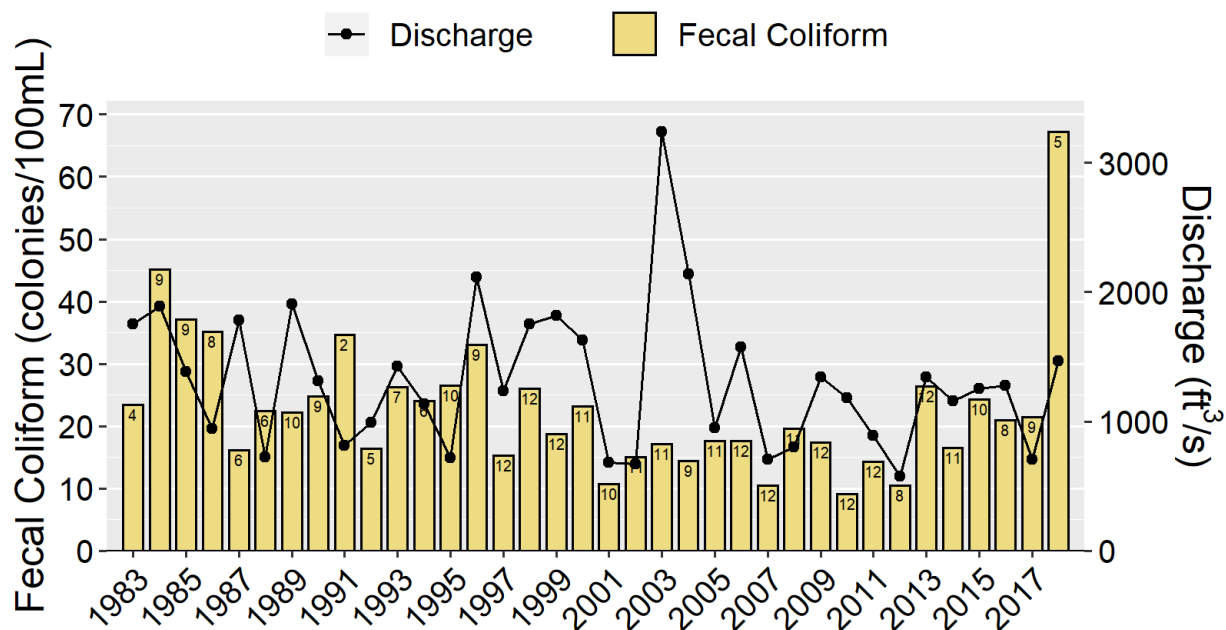
D0000050

Yearly Average Values



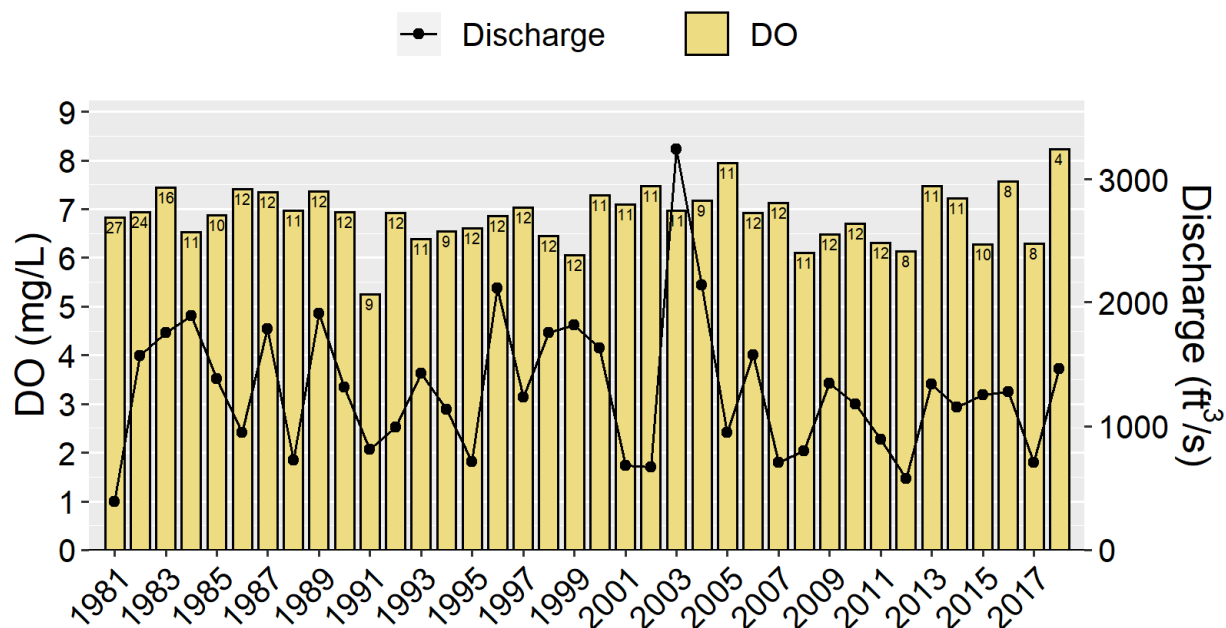
D0000050

Yearly Geometric Mean Values



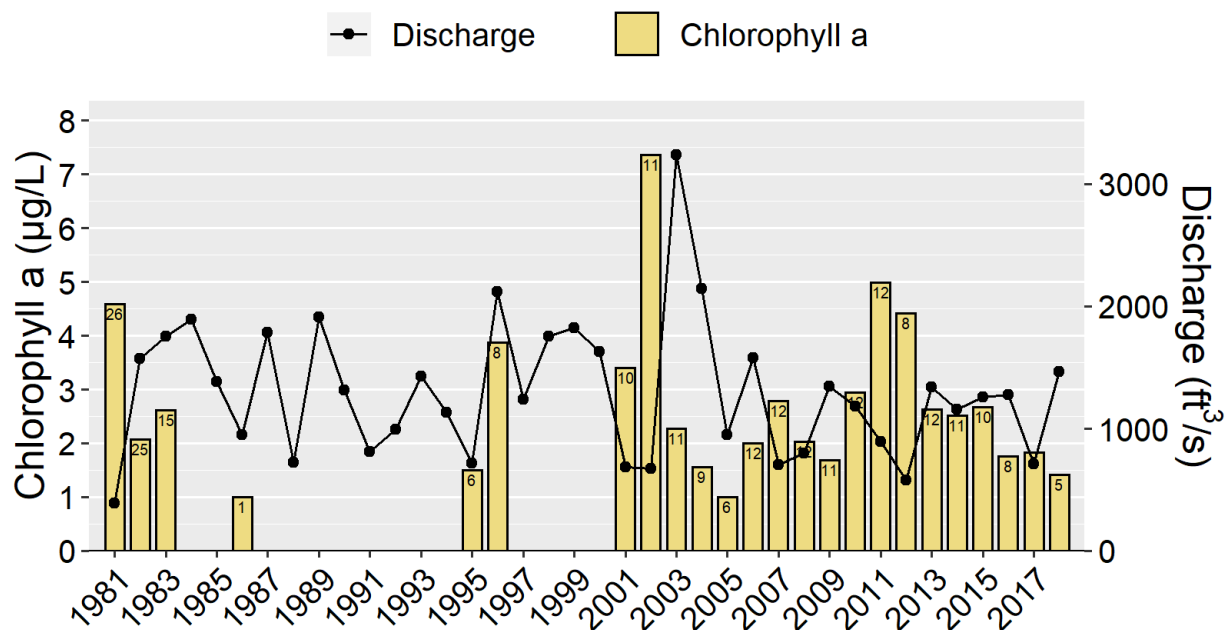
D0000050

Yearly Average Values



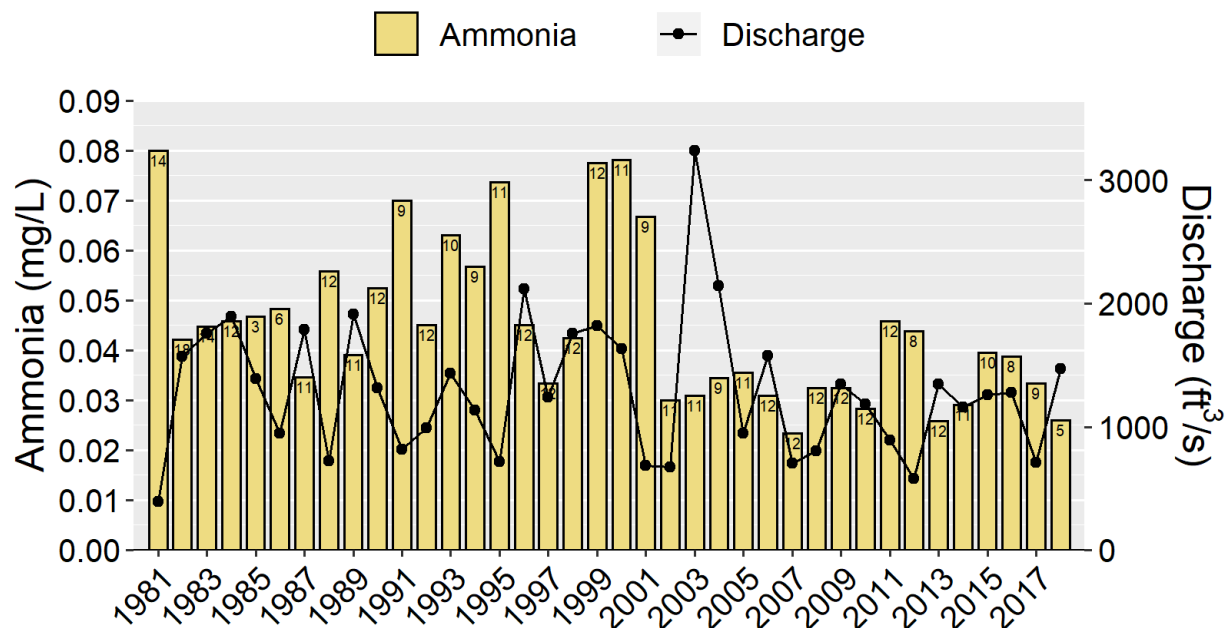
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Yearly Average Values



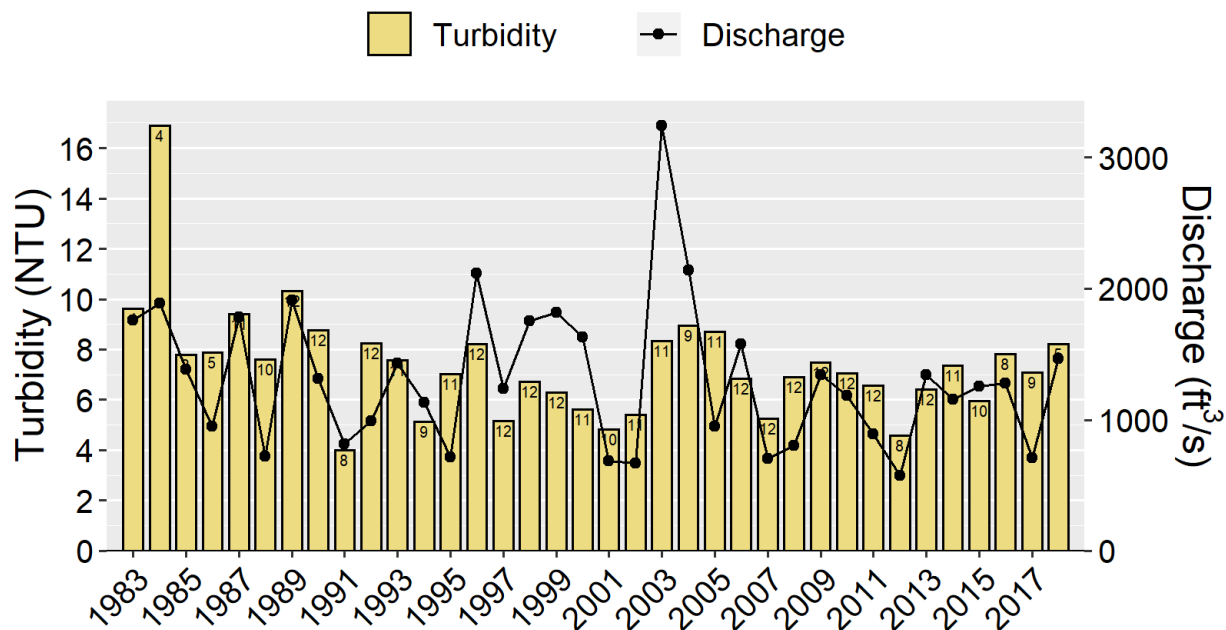
D0000050

Yearly Average Values



D0000050

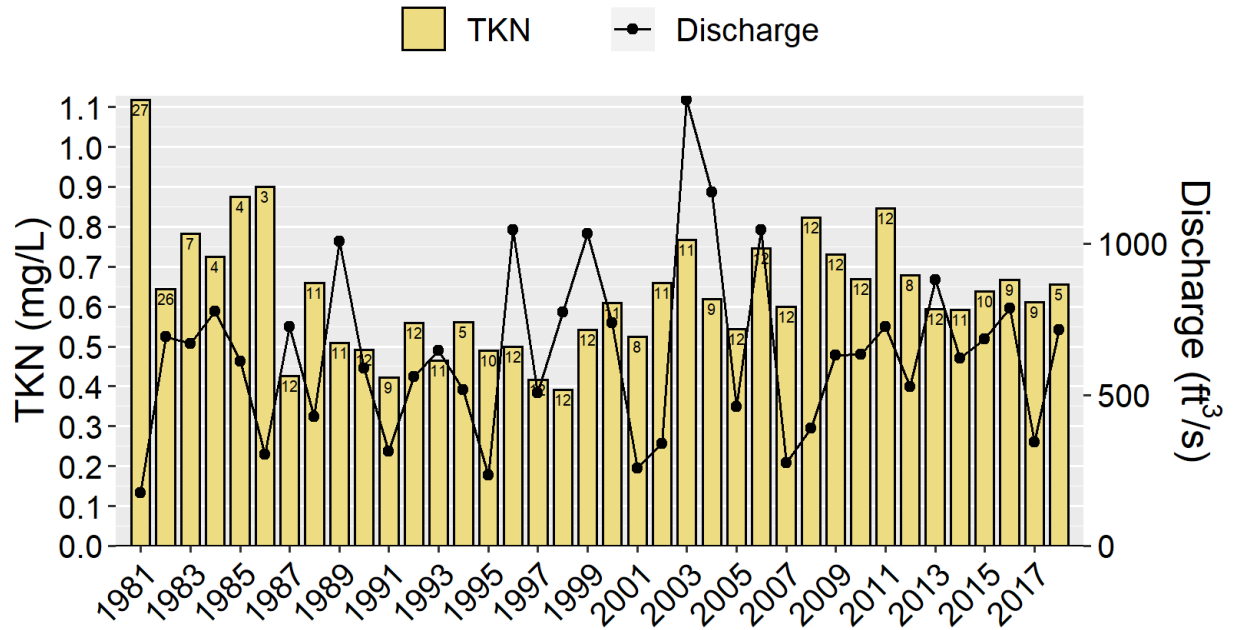
Yearly Average Values



BLACKWATER RIVER .5 MI UPS MOUTH NEAR WYANOKE Ambient Monitoring Station Water Quality Data with the Number of Samples Collected inside the Bar, Annual Weighted Means, and Annual Median values with the Backwater River Discharge (USGS Gage: 02049500).

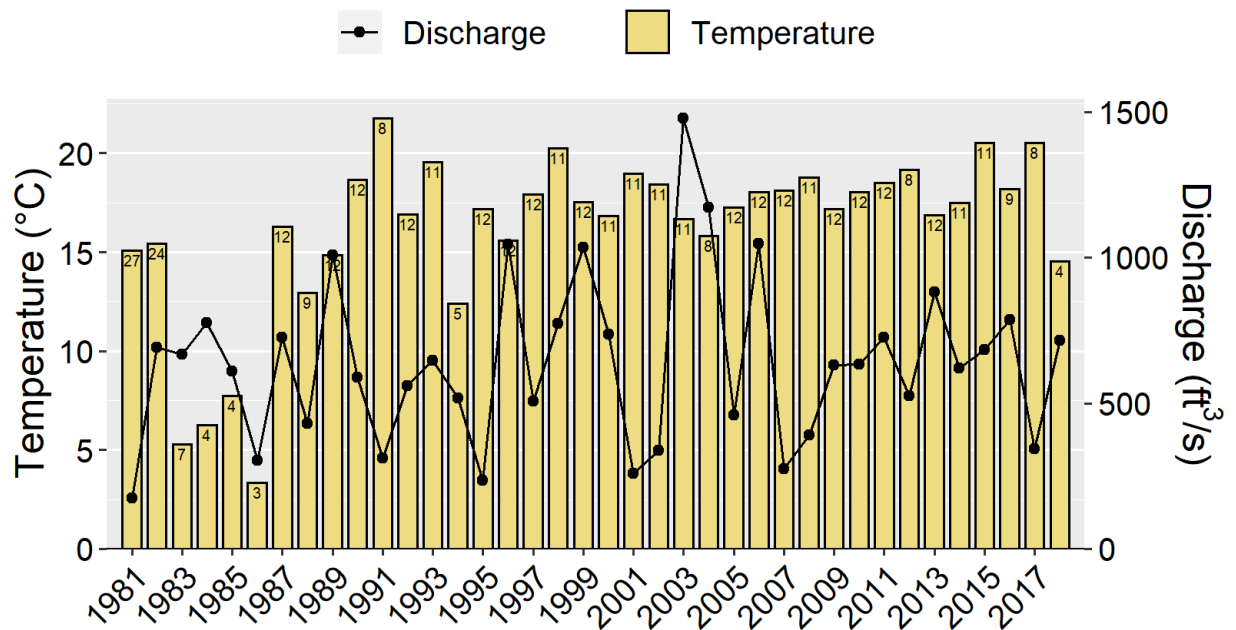
D0001800

Yearly Average Values



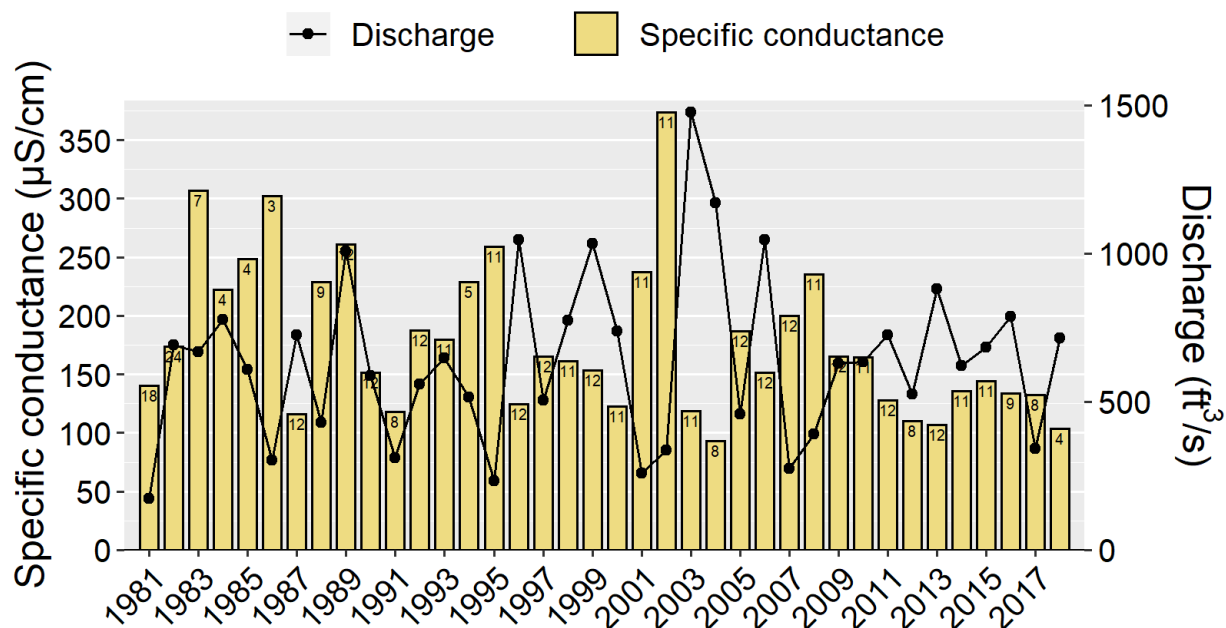
D0001800

Yearly Average Values



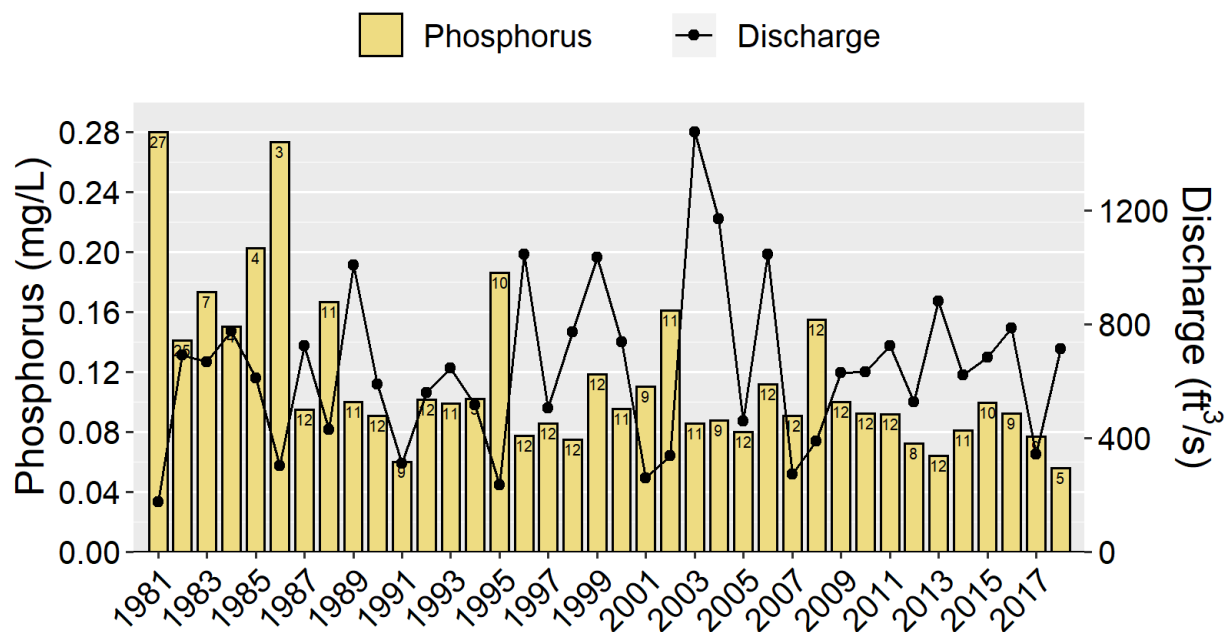
D0001800

Yearly Average Values



D0001800

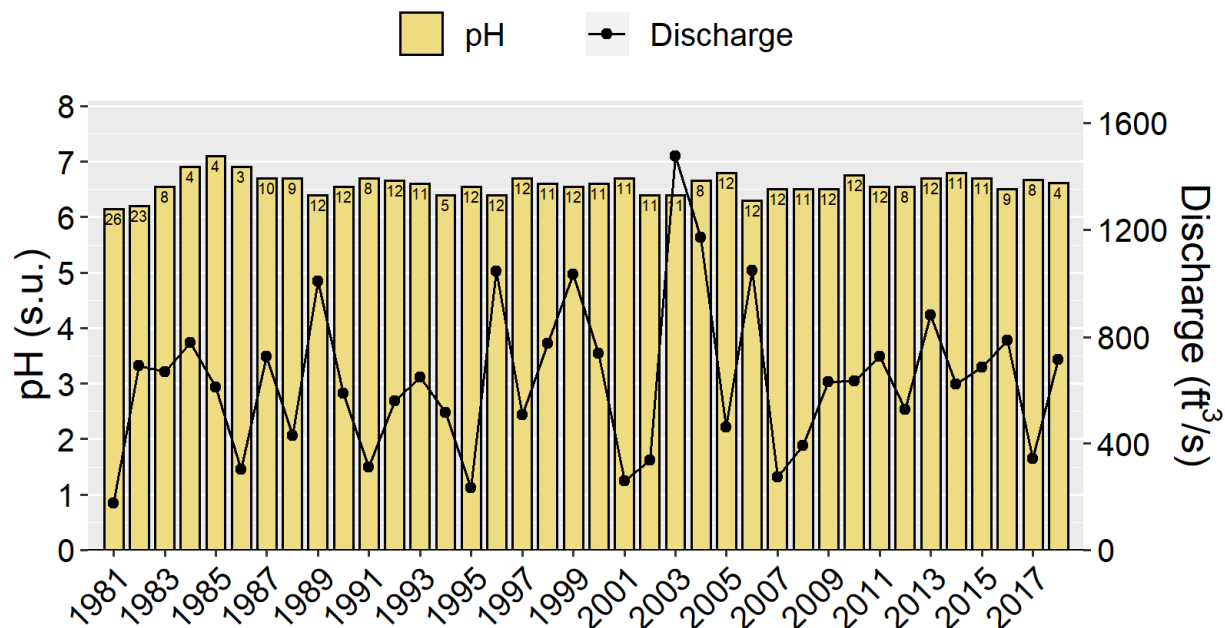
Yearly Average Values





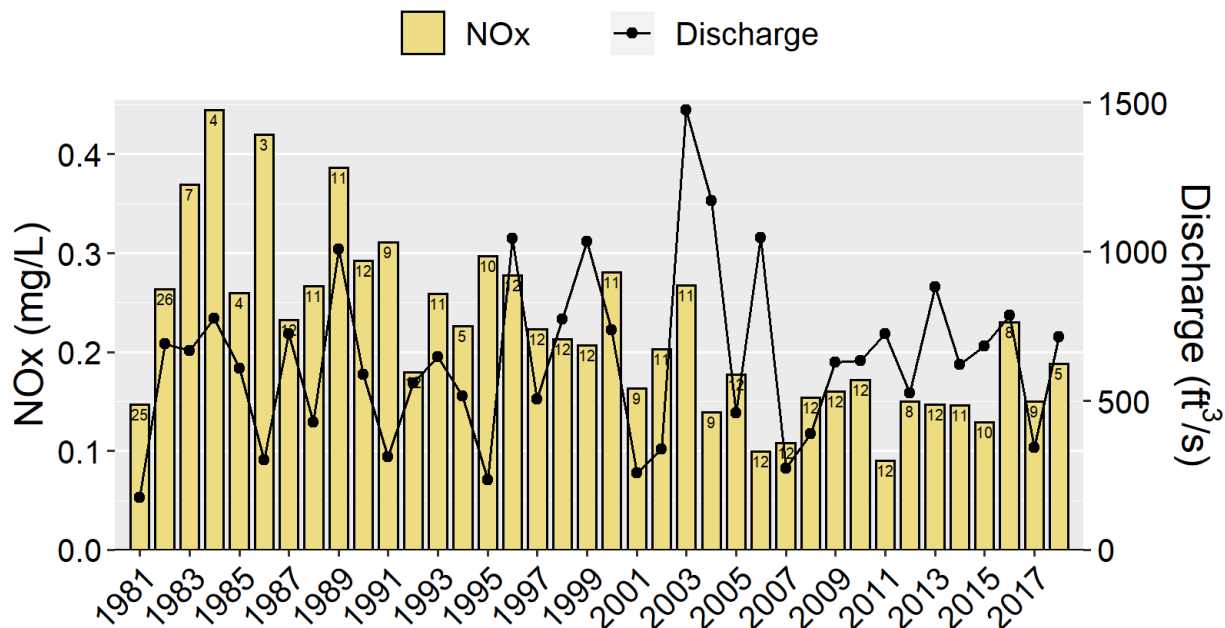
D0001800

Yearly Median Values



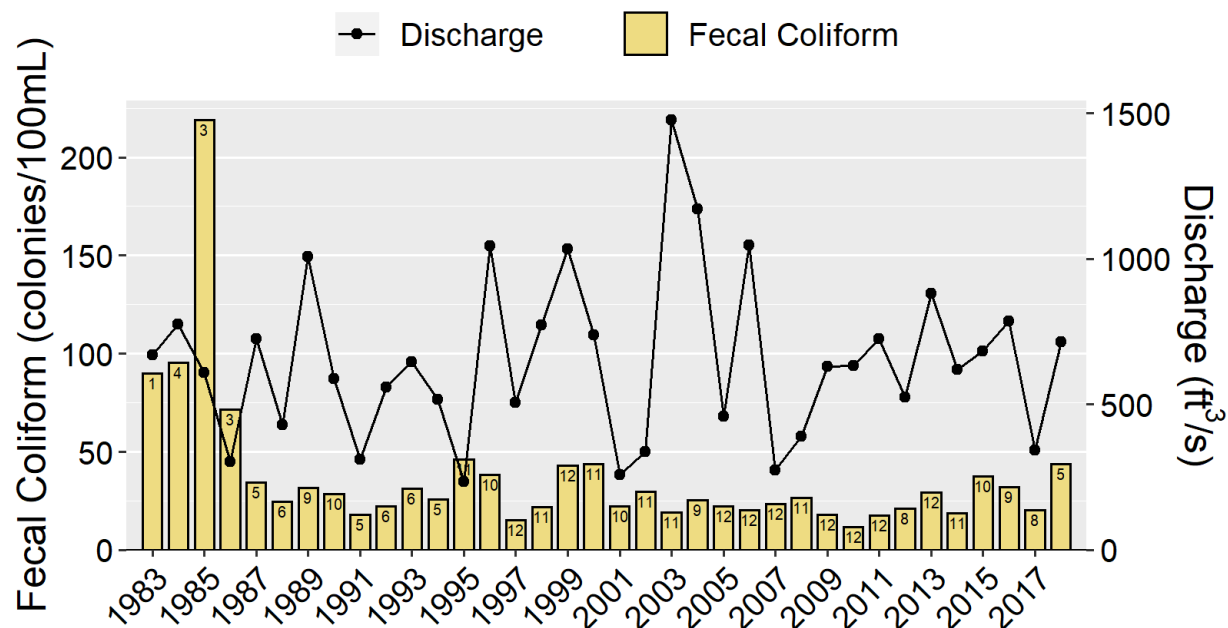
D0001800

Yearly Average Values



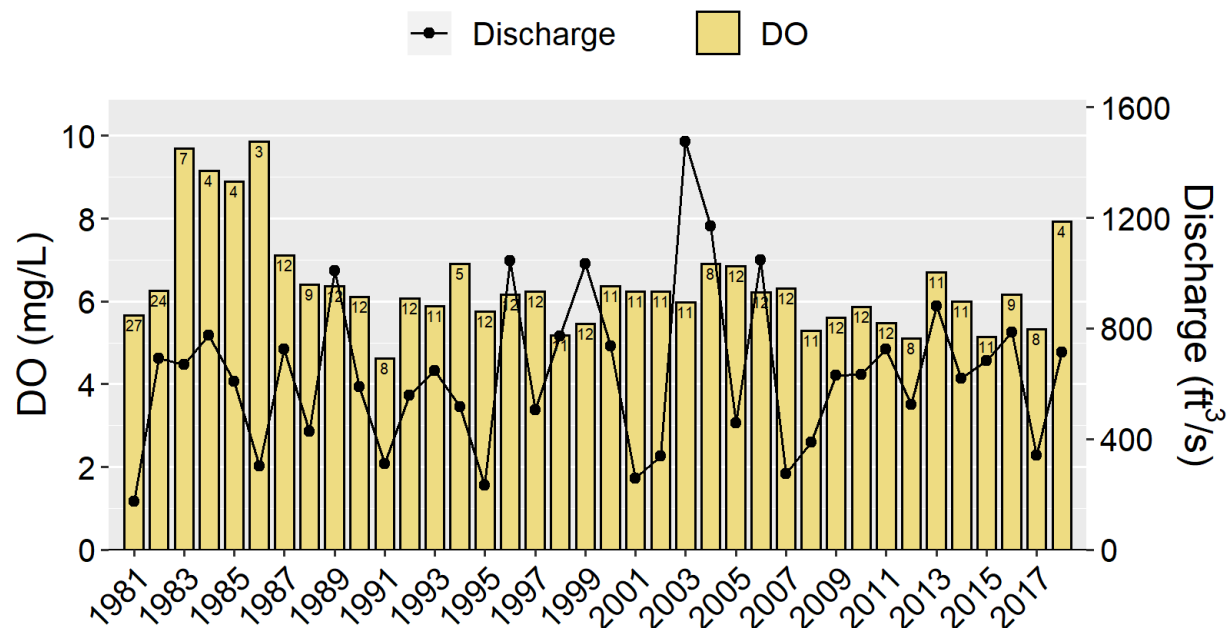
D0001800

Yearly Geometric Mean Values



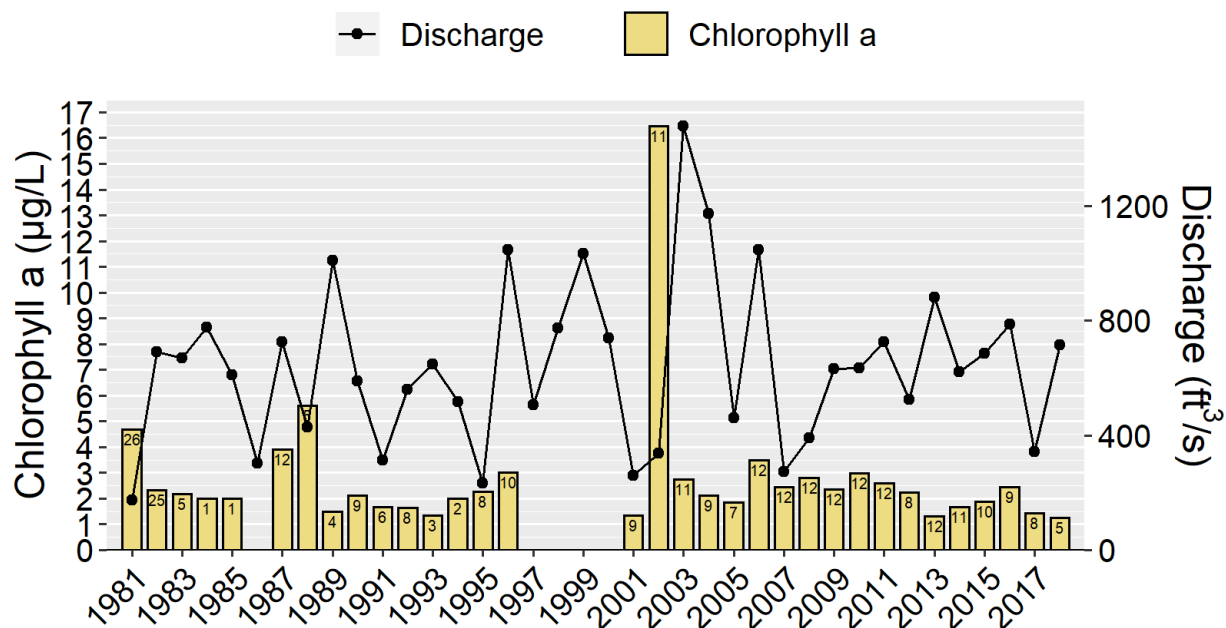
D0001800

Yearly Average Values



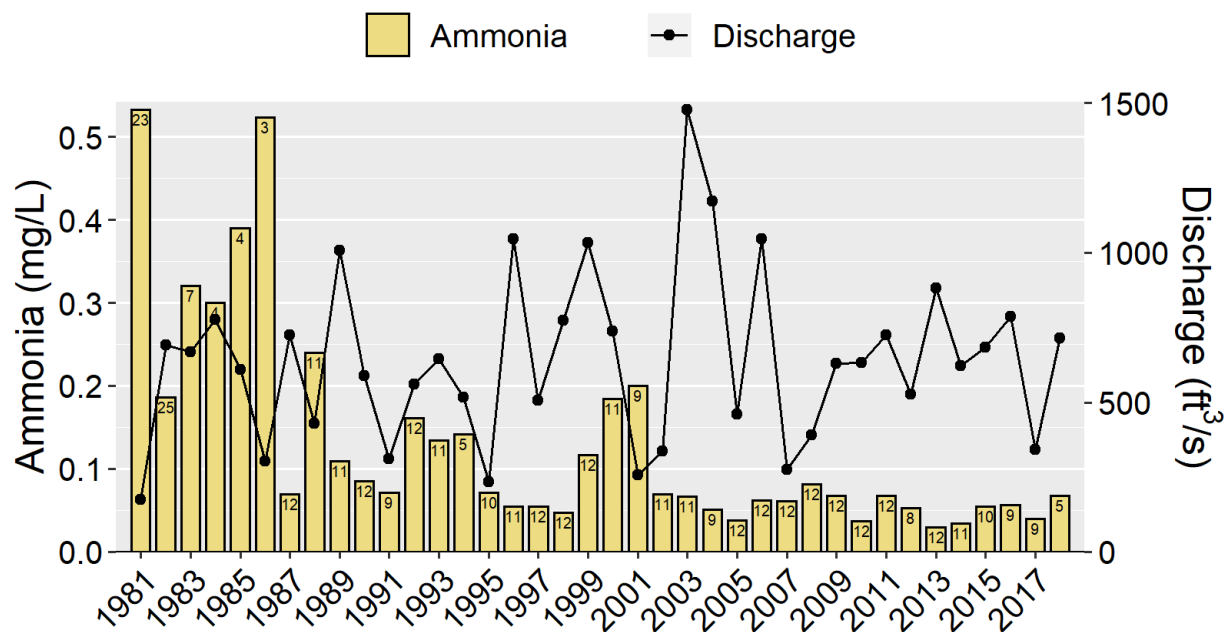
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Yearly Average Values



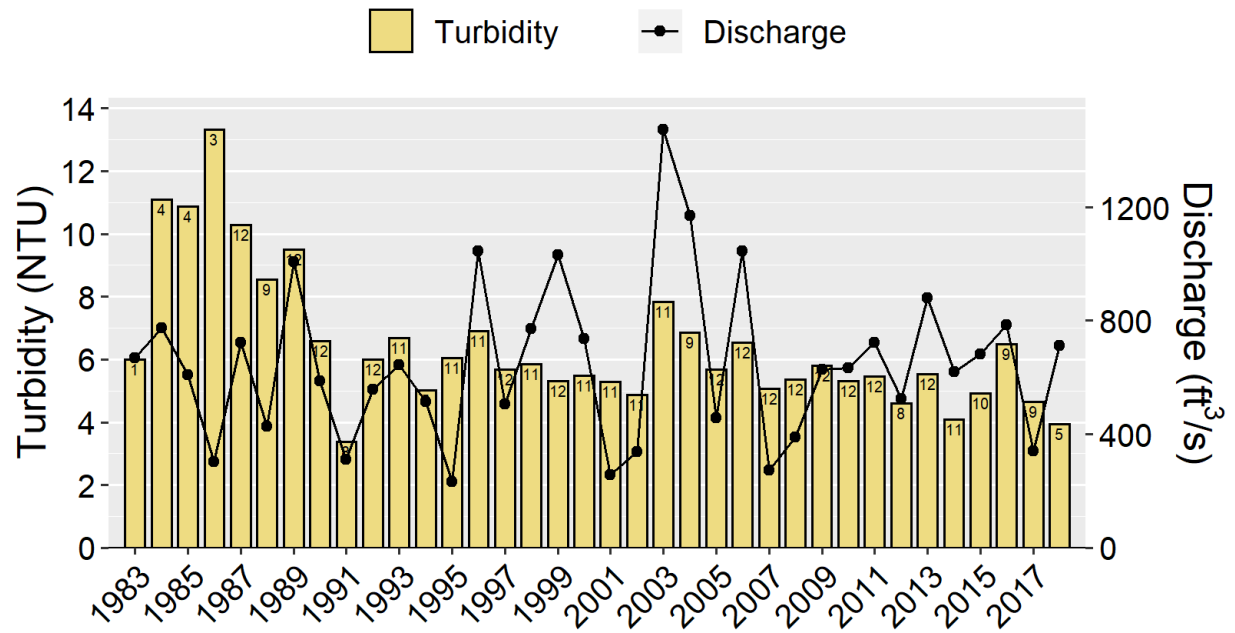
D0001800

Yearly Average Values



D0001800

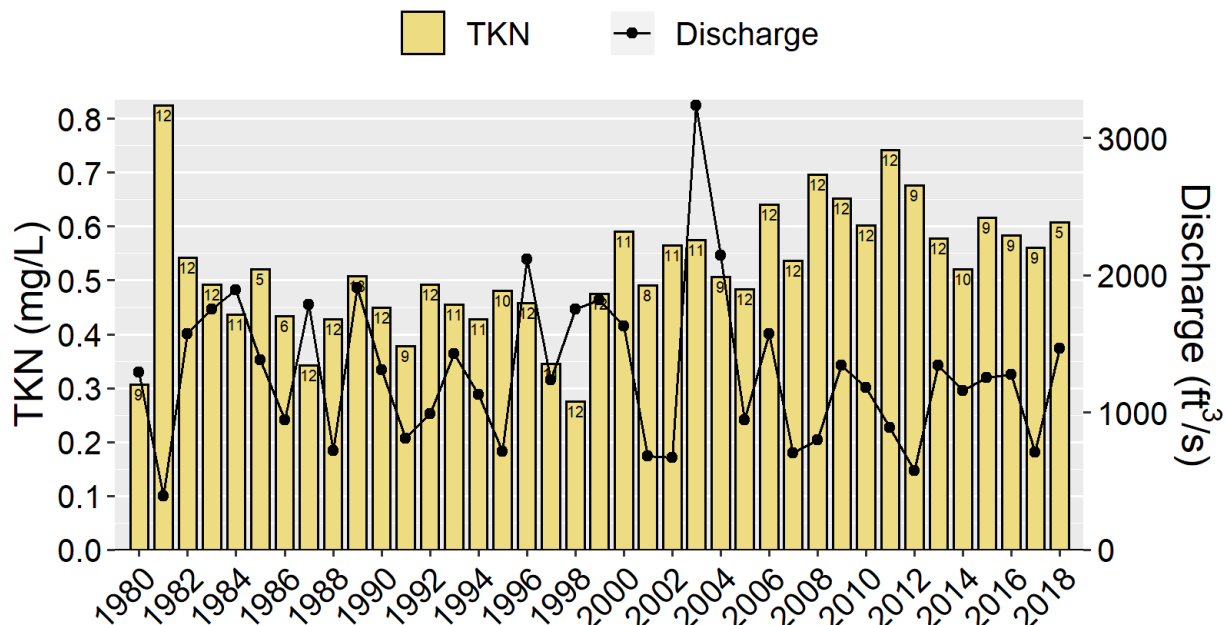
Yearly Average Values



CHOWAN RIVER NEAR RIDDICKSVILLE Ambient Monitoring Station Water Quality Data with the Number of Samples Collected inside the Bar, Annual Weighted Means, and Annual Median values with the Nottoway River Discharge (USGS Gage: 02047000).

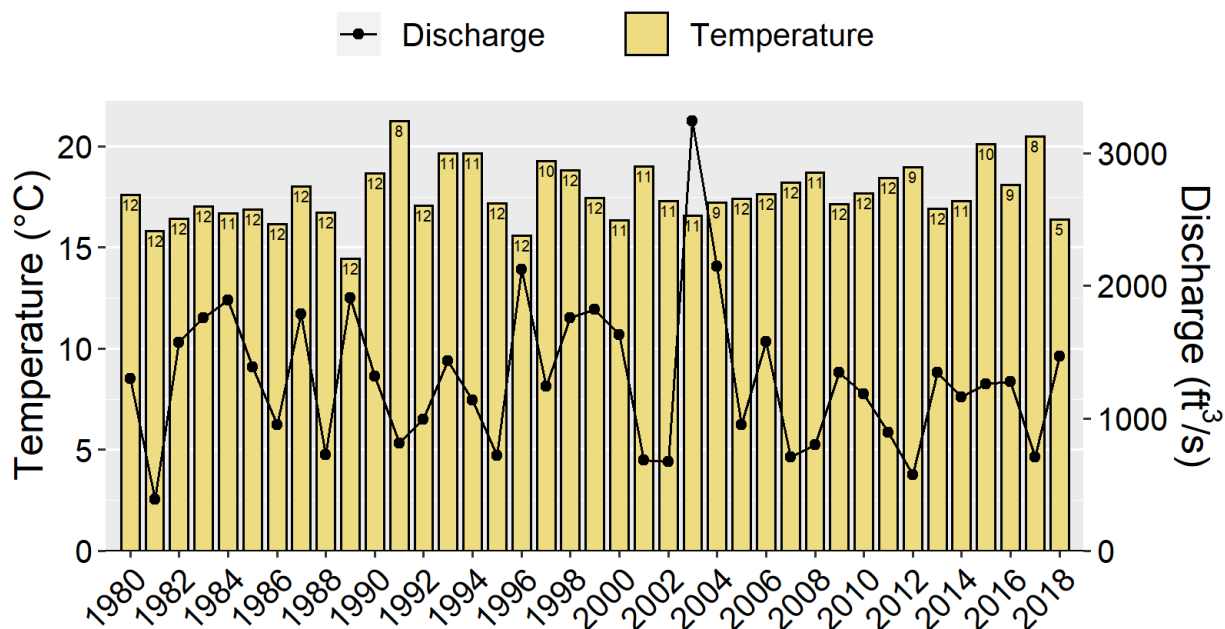
D0010000

Yearly Average Values



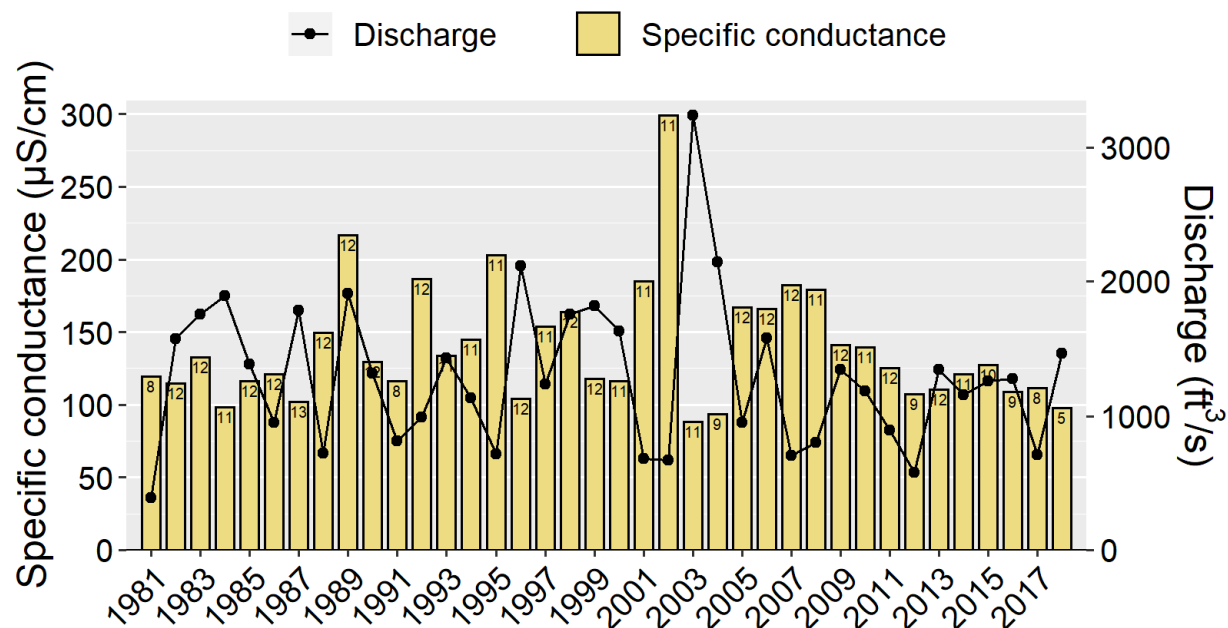
D0010000

Yearly Average Values



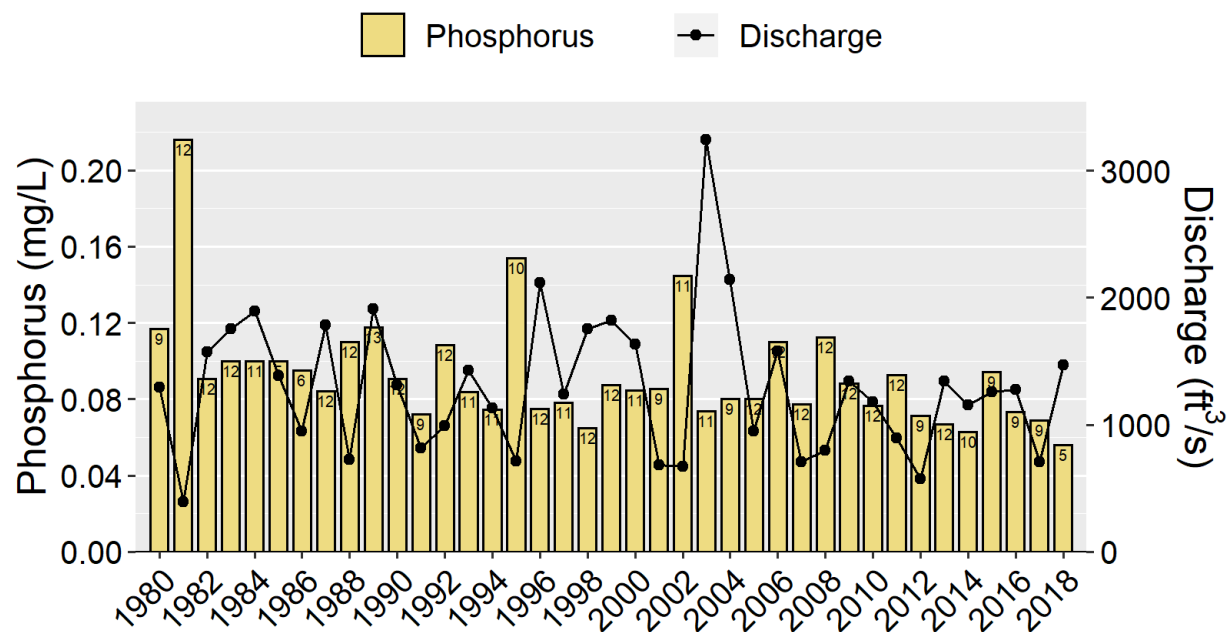
D0010000

Yearly Average Values



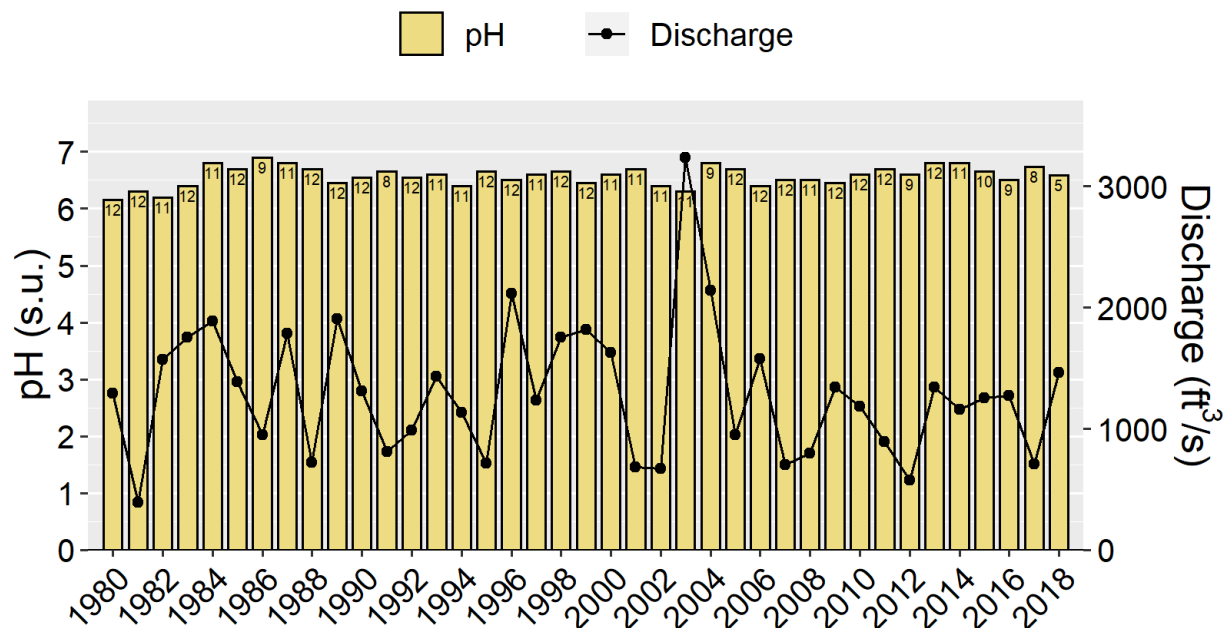
D0010000

Yearly Average Values



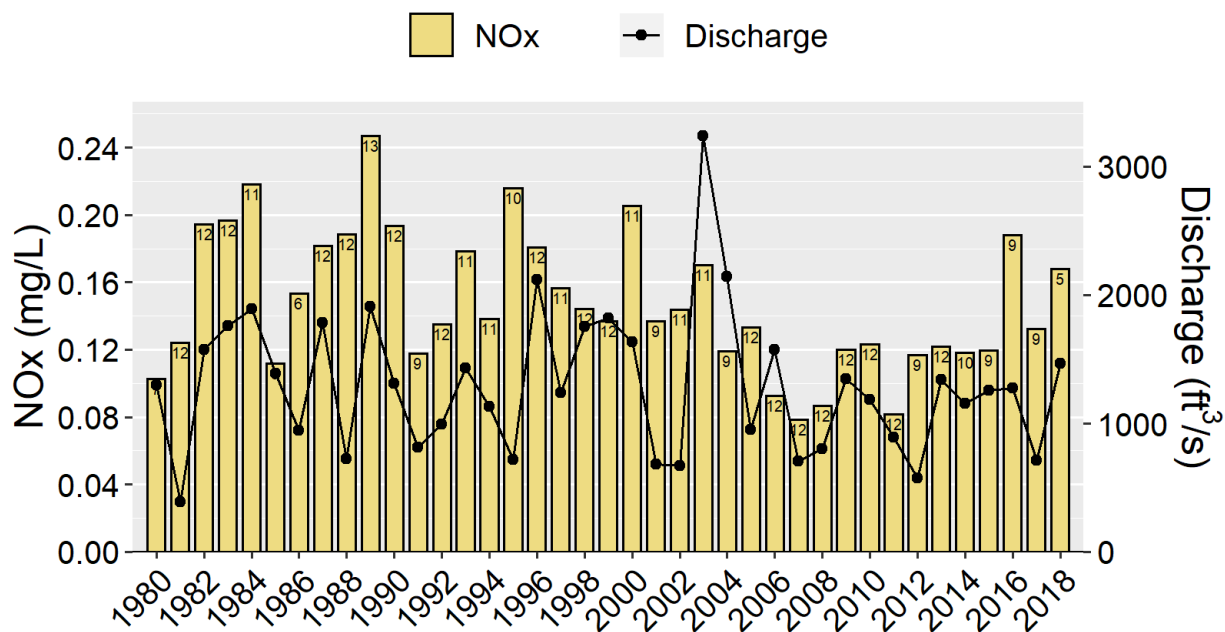
D0010000

Yearly Median Values



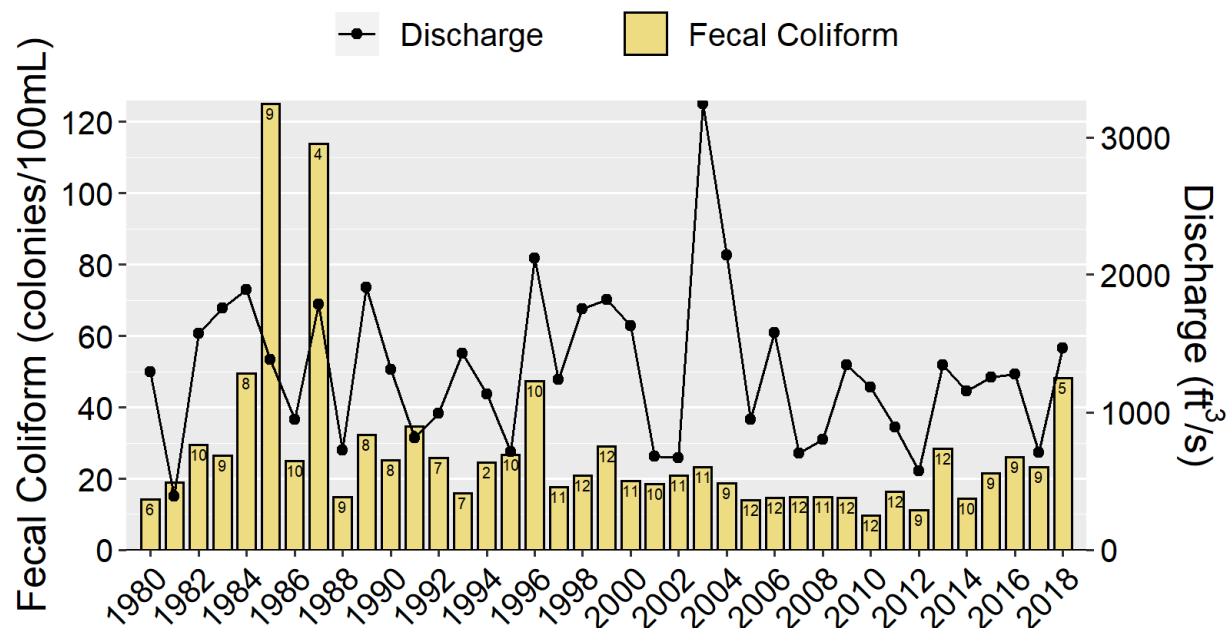
D0010000

Yearly Average Values



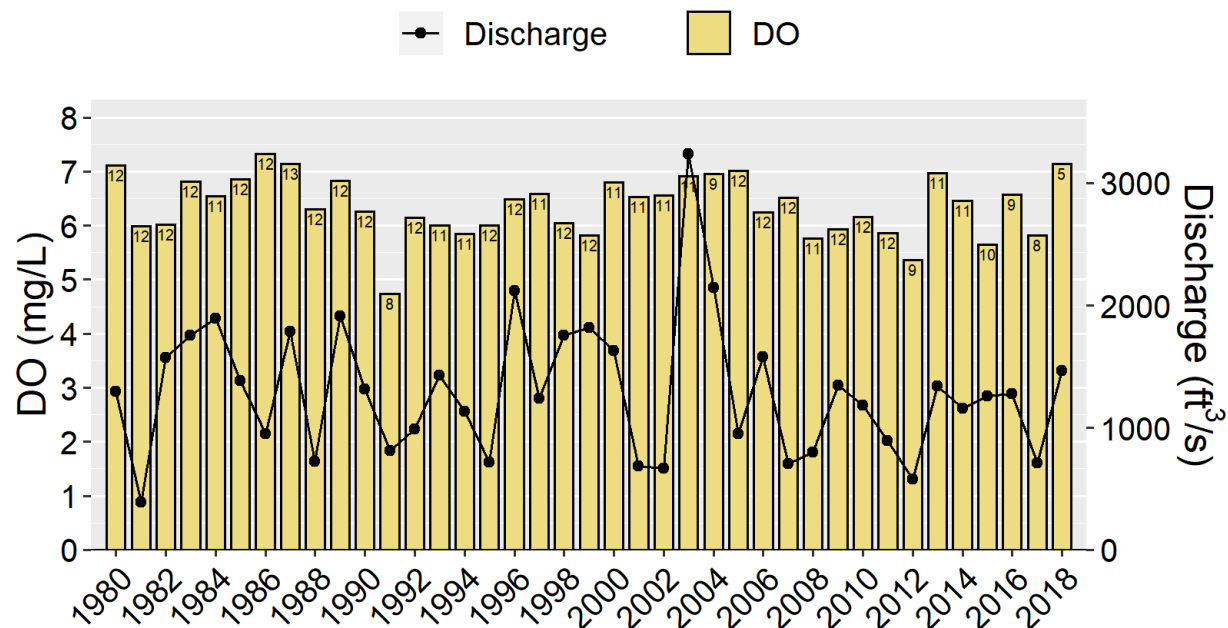
D0010000

Yearly Geometric Mean Values



D0010000

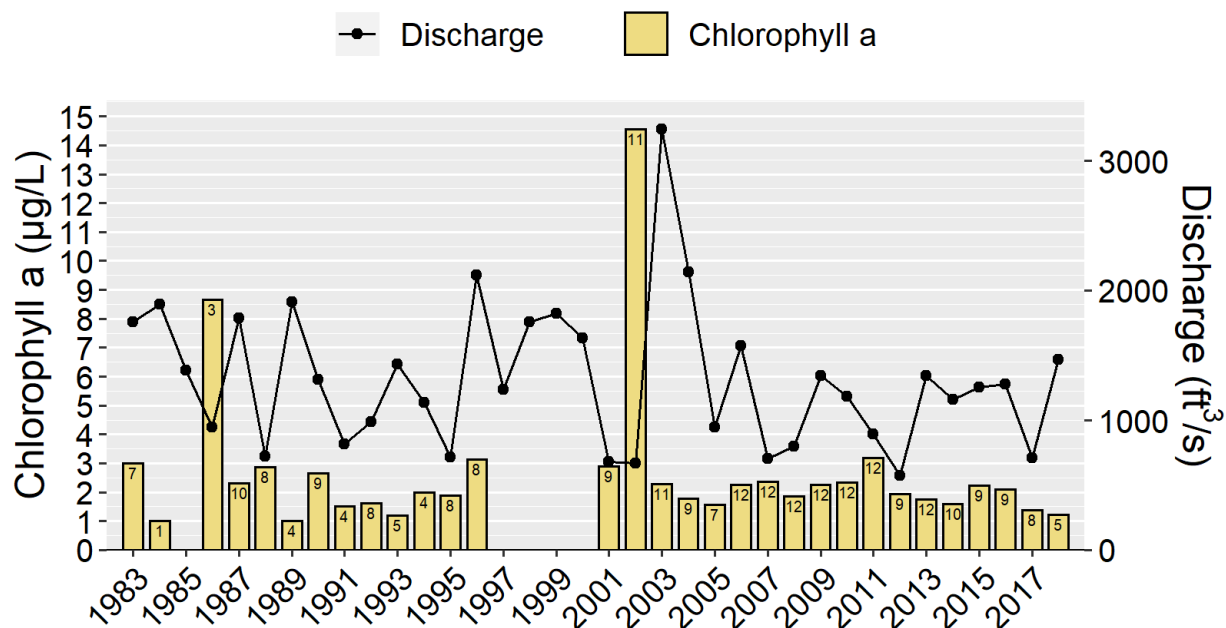
Yearly Average Values





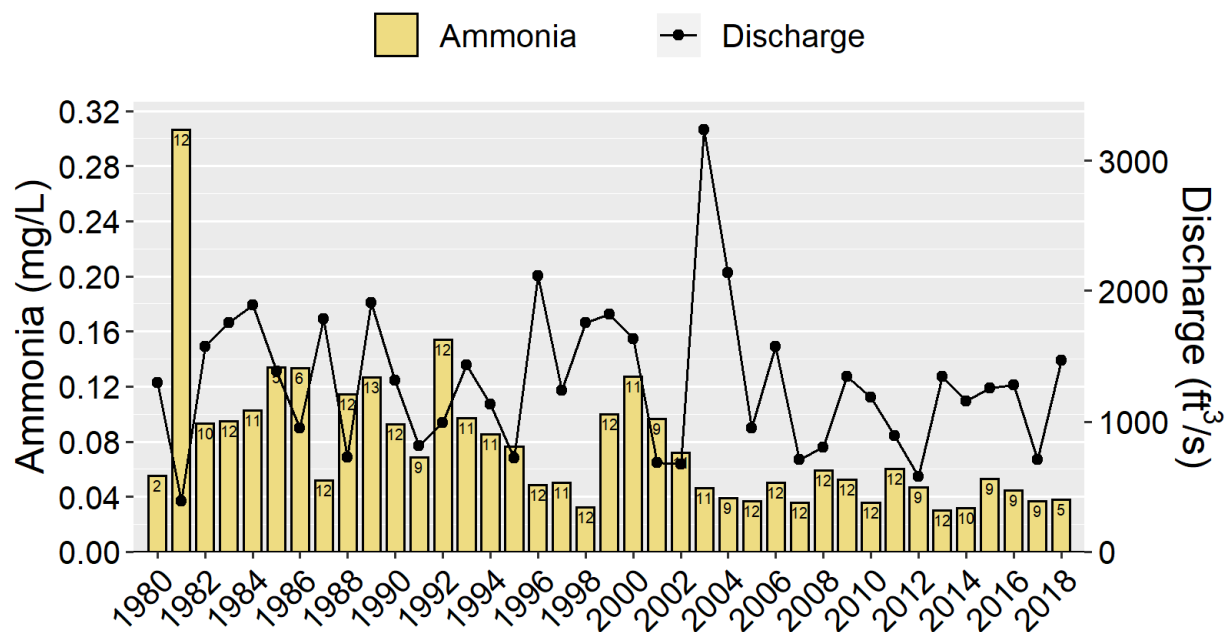
D0010000

Yearly Average Values



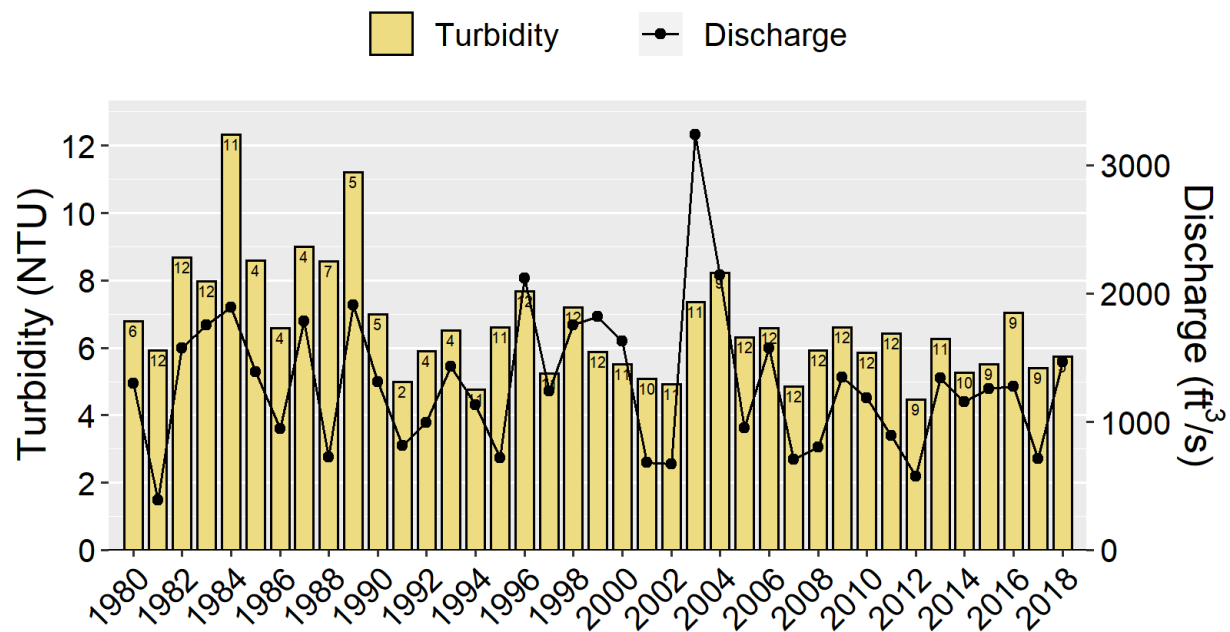
D0010000

Yearly Average Values



D0010000

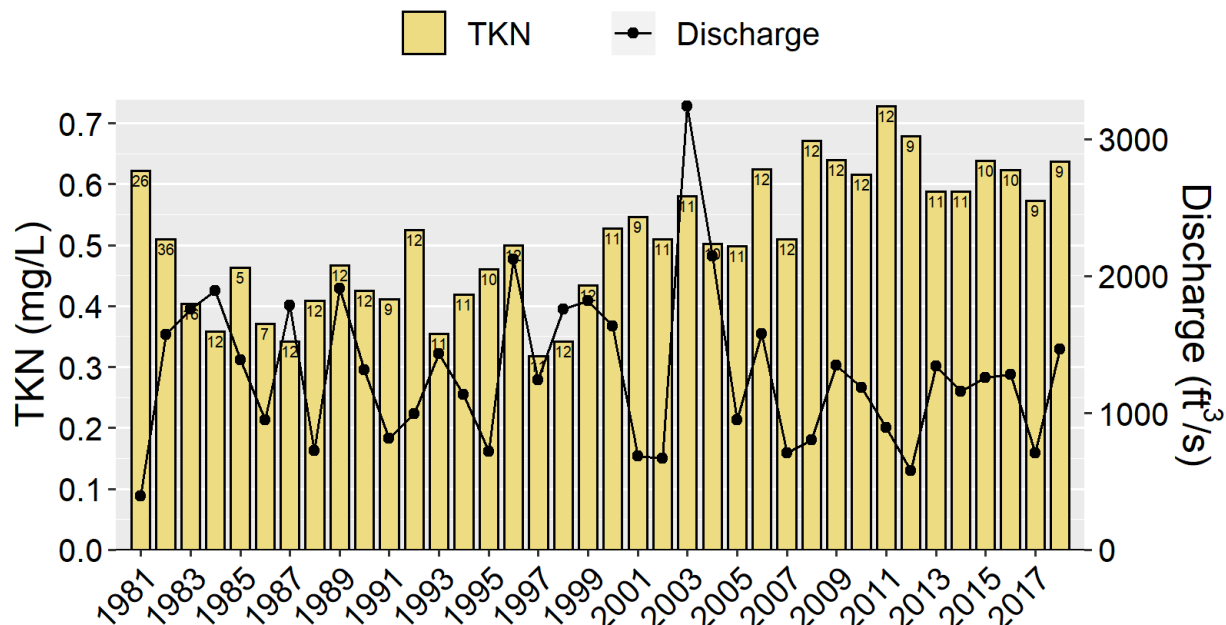
Yearly Average Values



CHOWAN RIVER AT US 13 AT WINTON Ambient Monitoring Station Water Quality Data with the Number of Samples Collected inside the Bar, Annual Weighted Means, and Annual Median values with the Nottoway River Discharge (USGS Gage: 02047000).

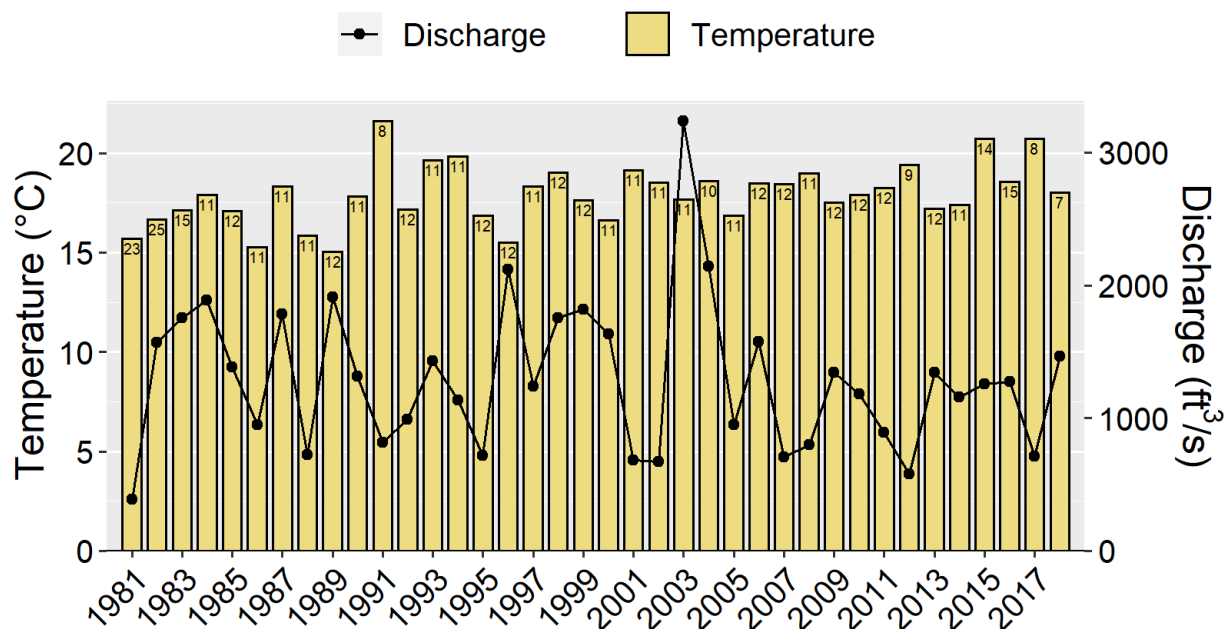
D6250000

Yearly Average Values



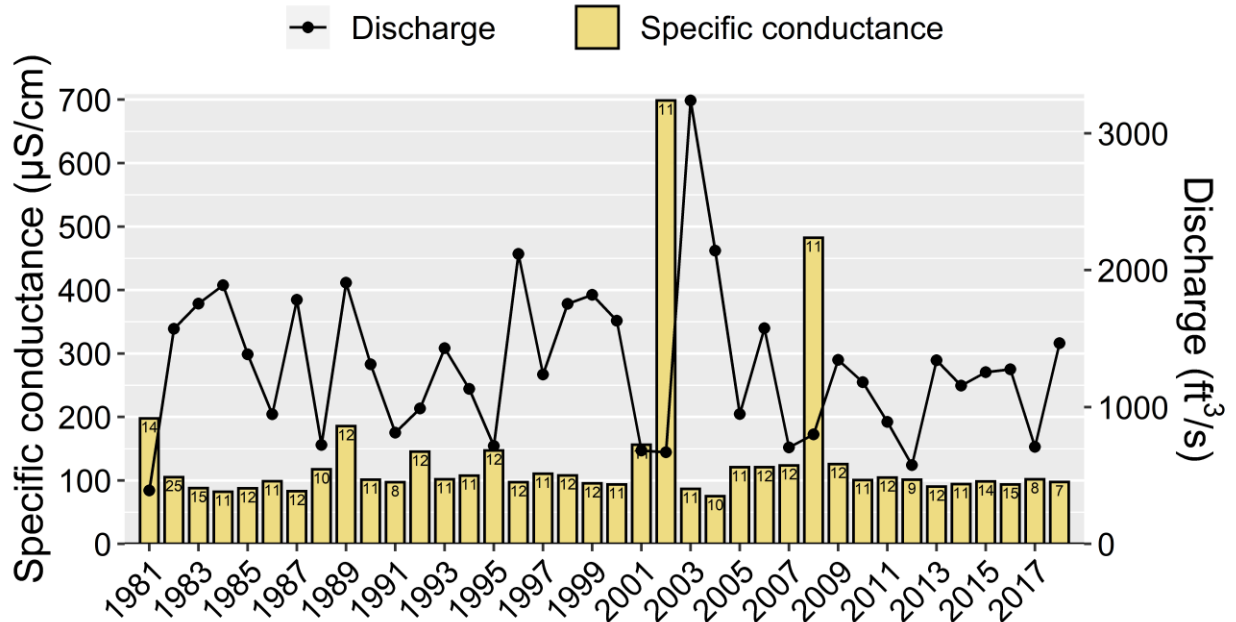
D6250000

Yearly Average Values



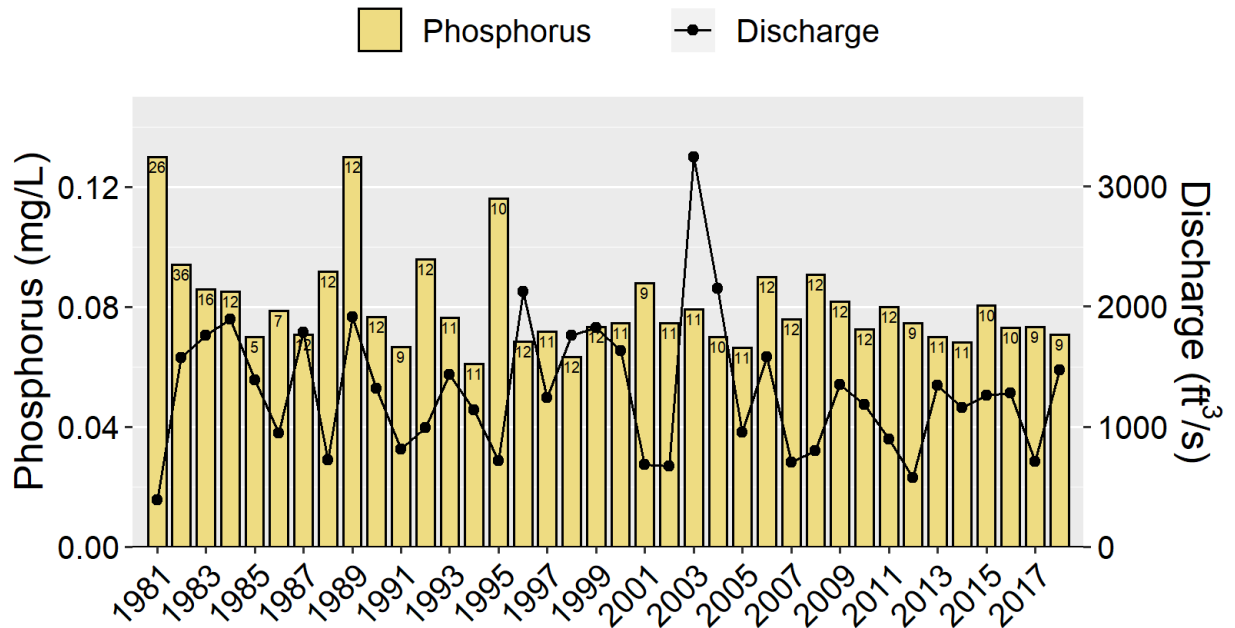
D6250000

Yearly Average Values



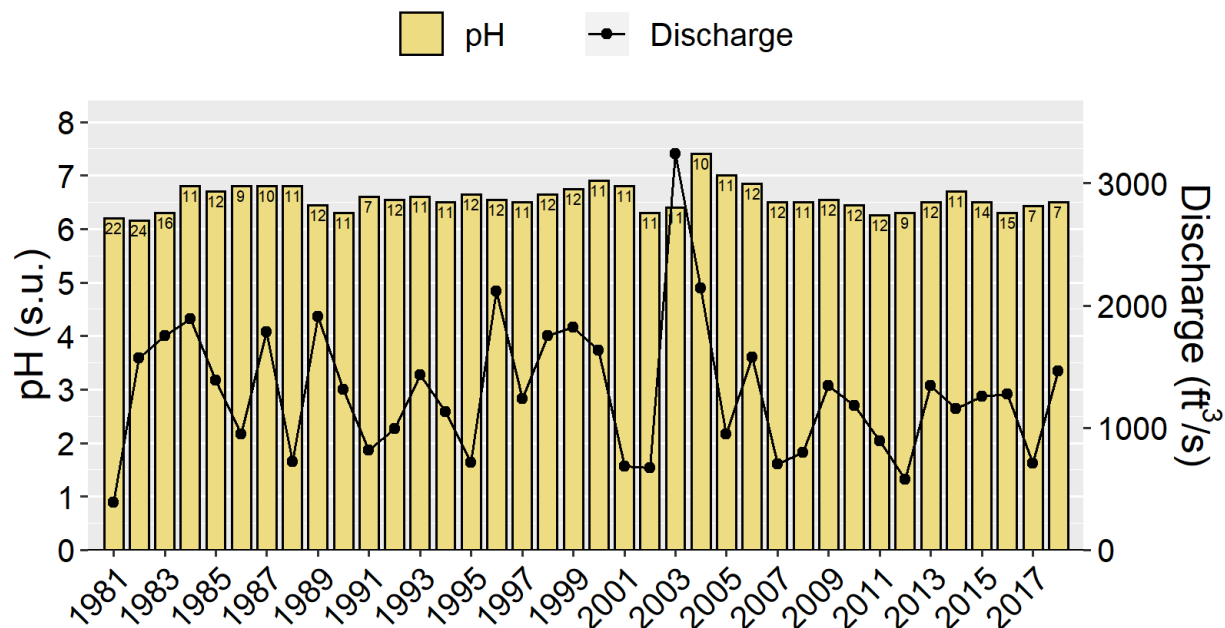
D6250000

Yearly Average Values



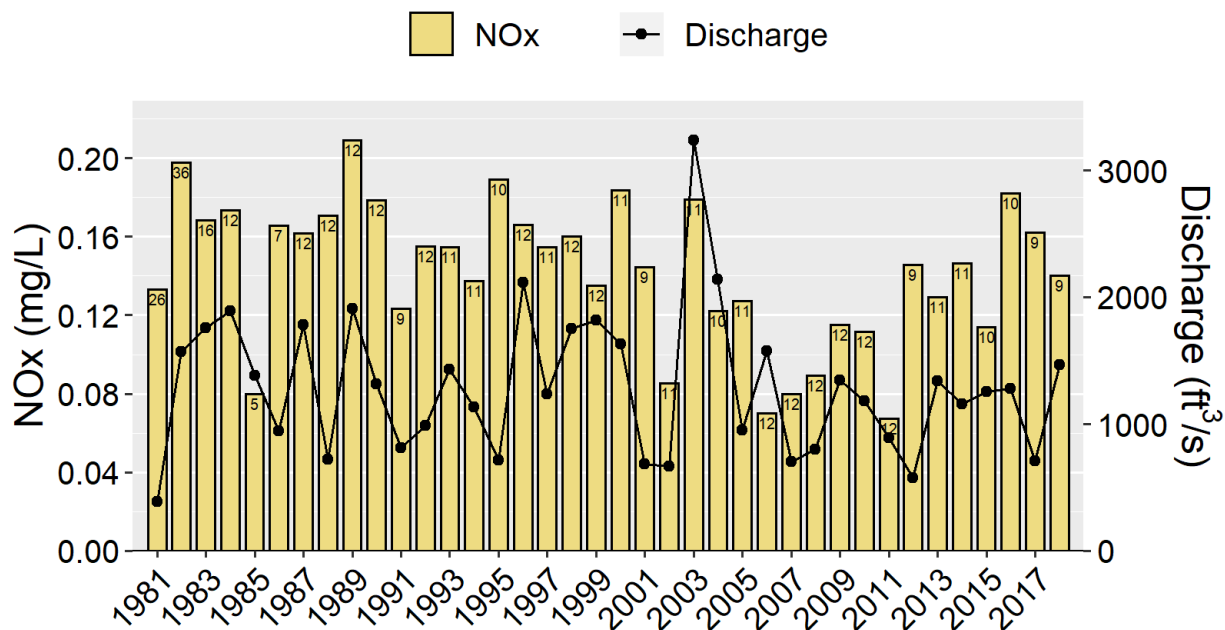
D6250000

Yearly Median Values



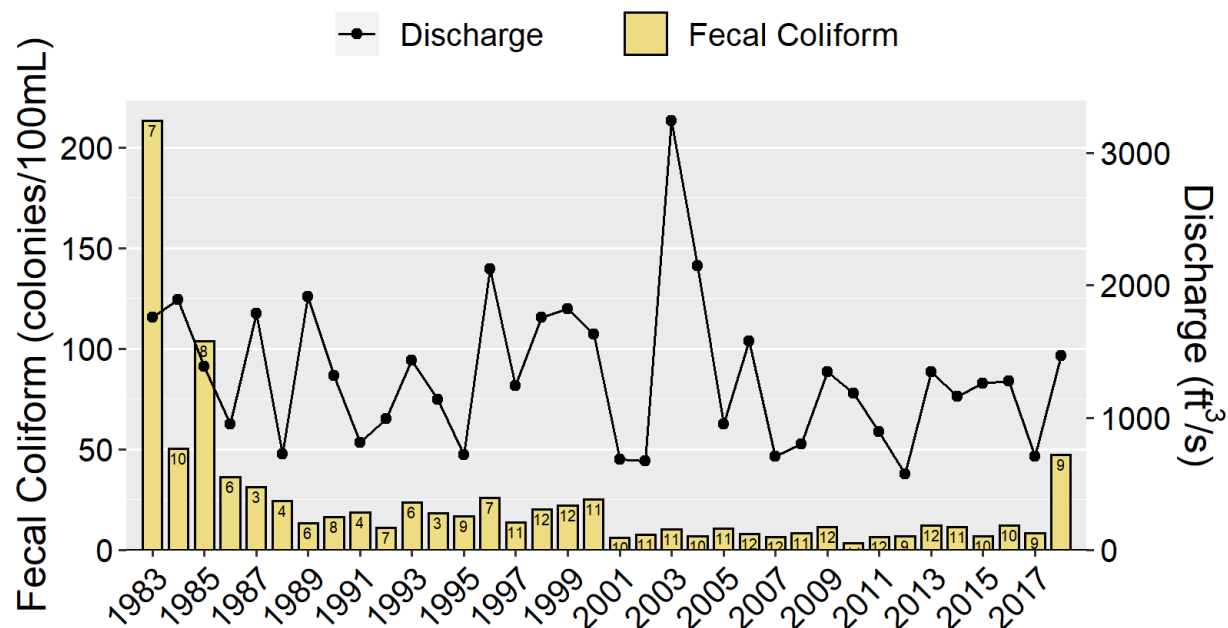
D6250000

Yearly Average Values



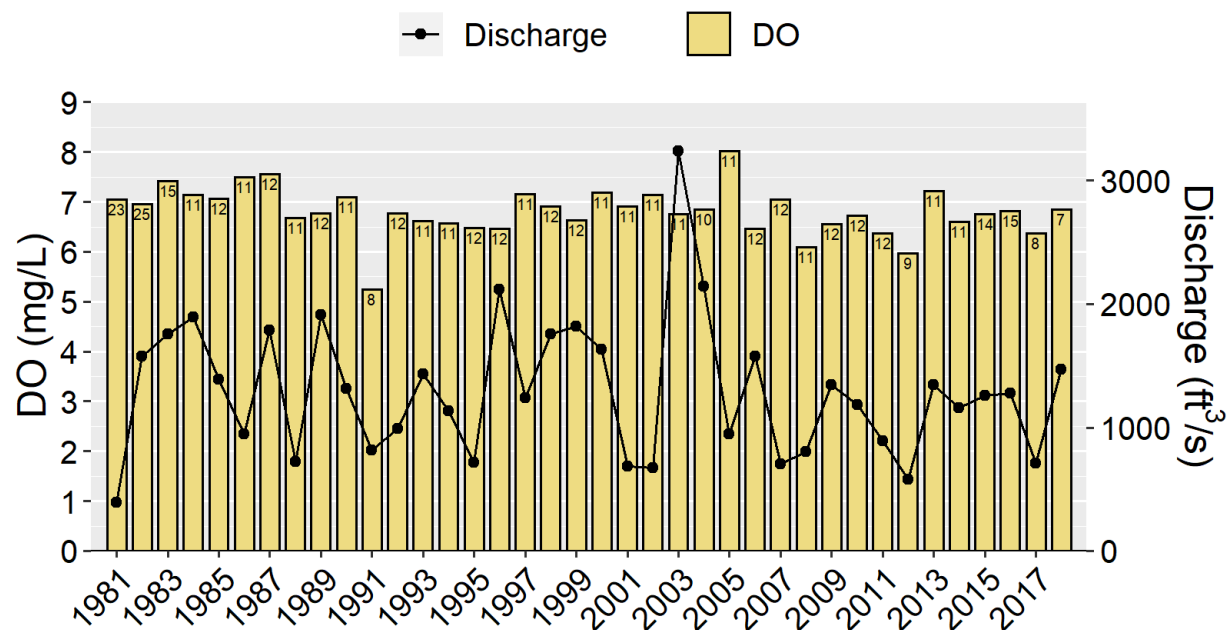
D6250000

Yearly Geometric Mean Values



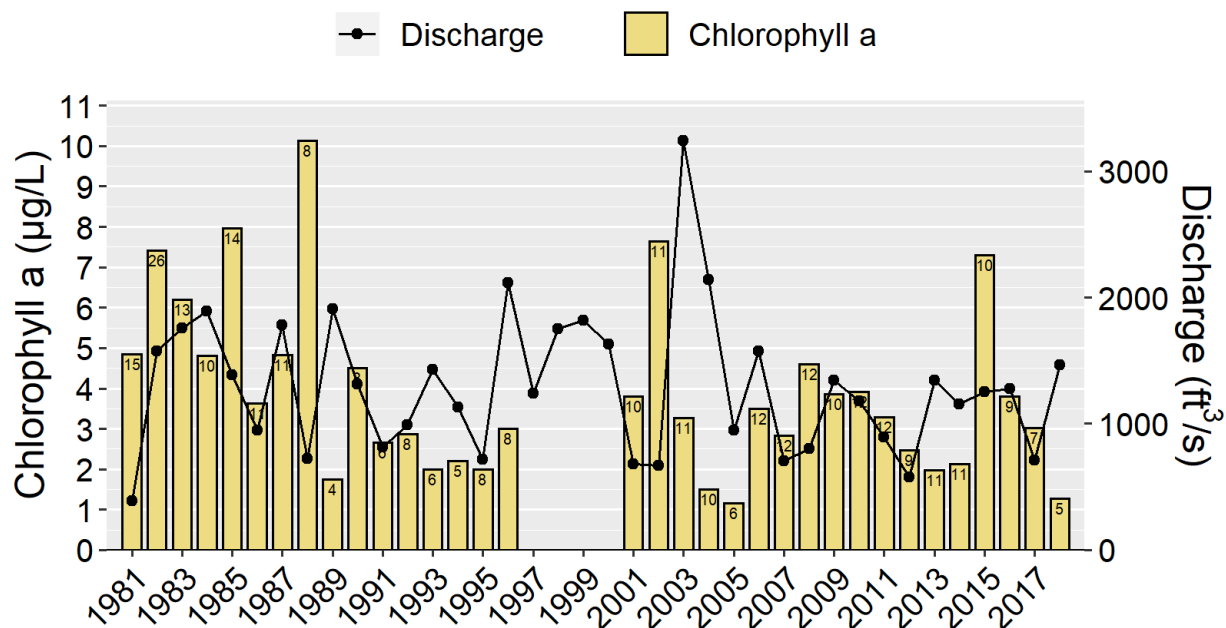
D6250000

Yearly Average Values



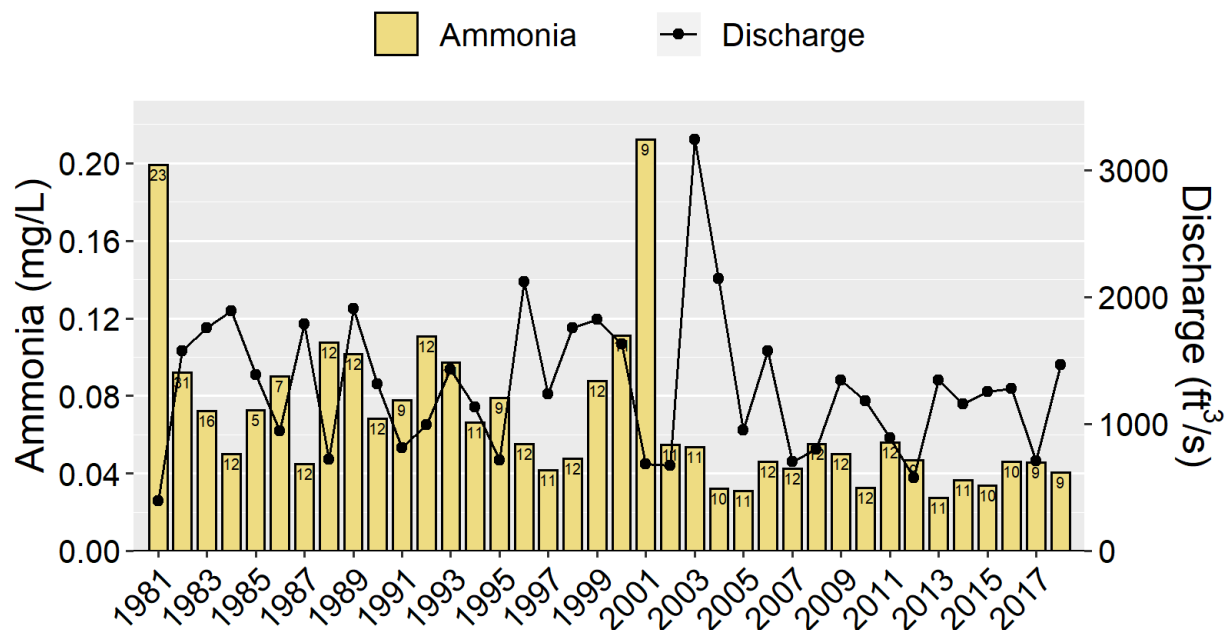
D6250000

Yearly Average Values



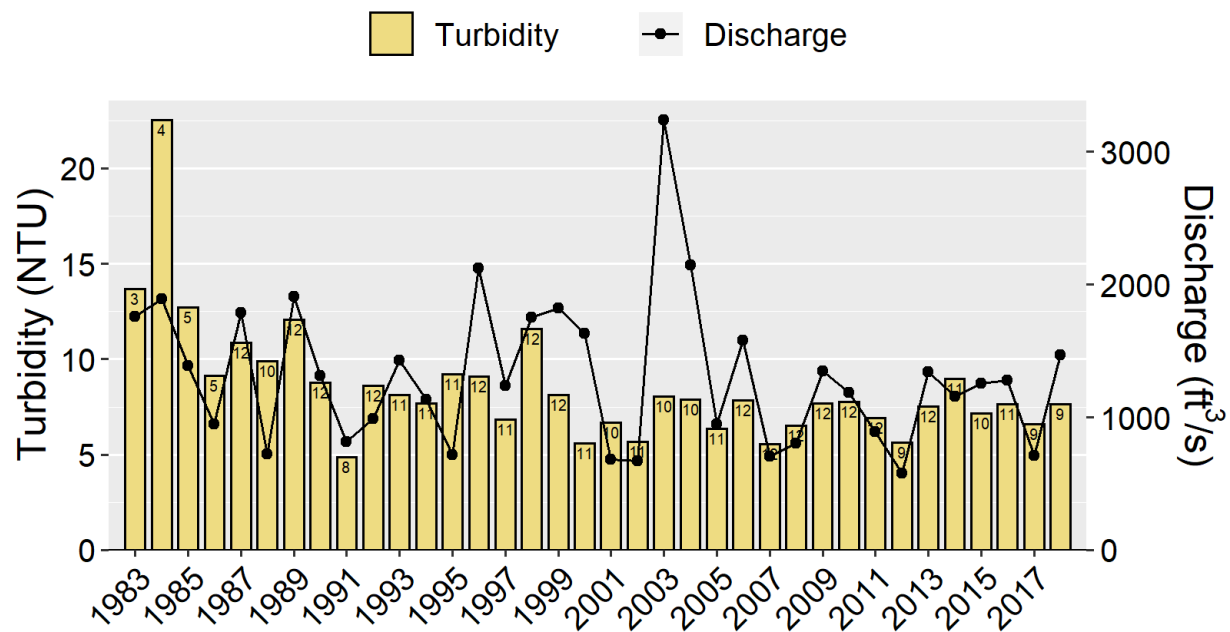
D6250000

Yearly Average Values



D6250000

Yearly Average Values

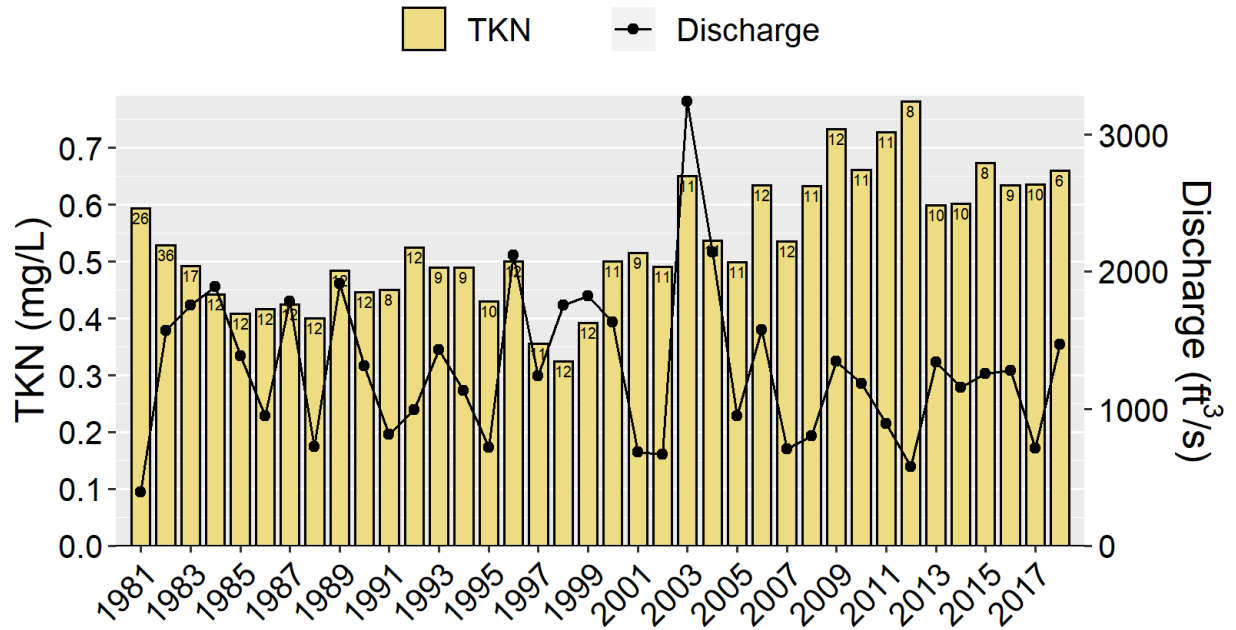




CHOWAN RIVER AT CHANNEL MARKER 16 NEAR GATESVILLE Ambient Monitoring Station Water Quality Data with the Number of Samples Collected inside the Bar, Annual Weighted Means, and Annual Median values with the Nottoway River Discharge (USGS Gage: 02047000).

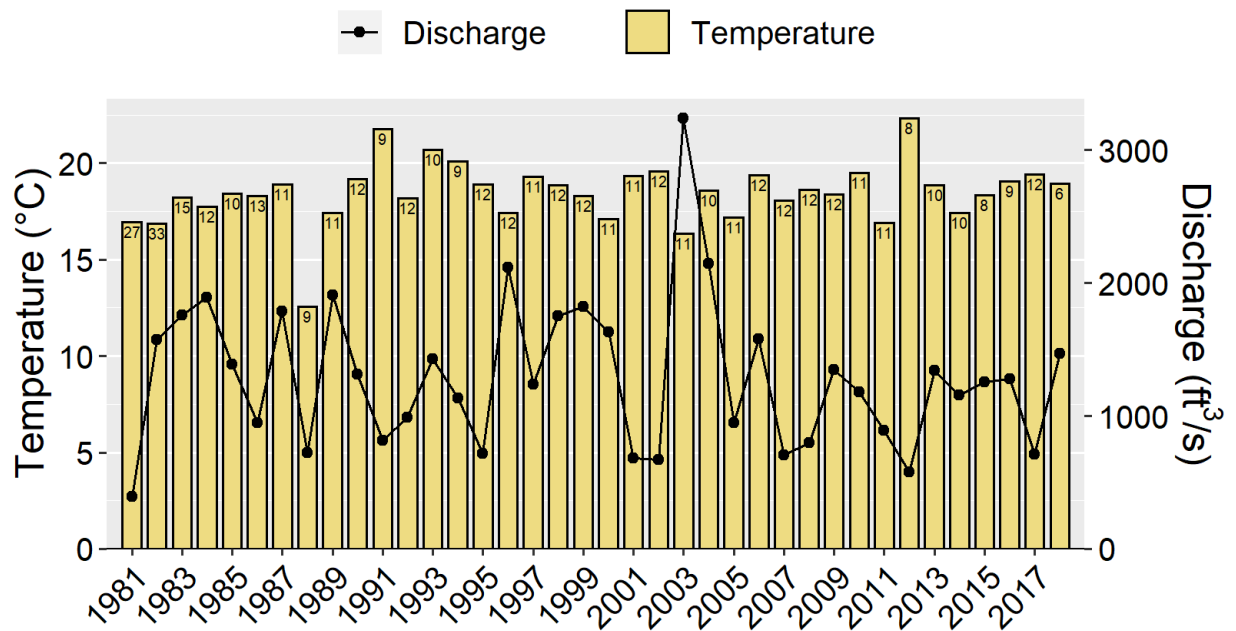
D8356200

Yearly Average Values



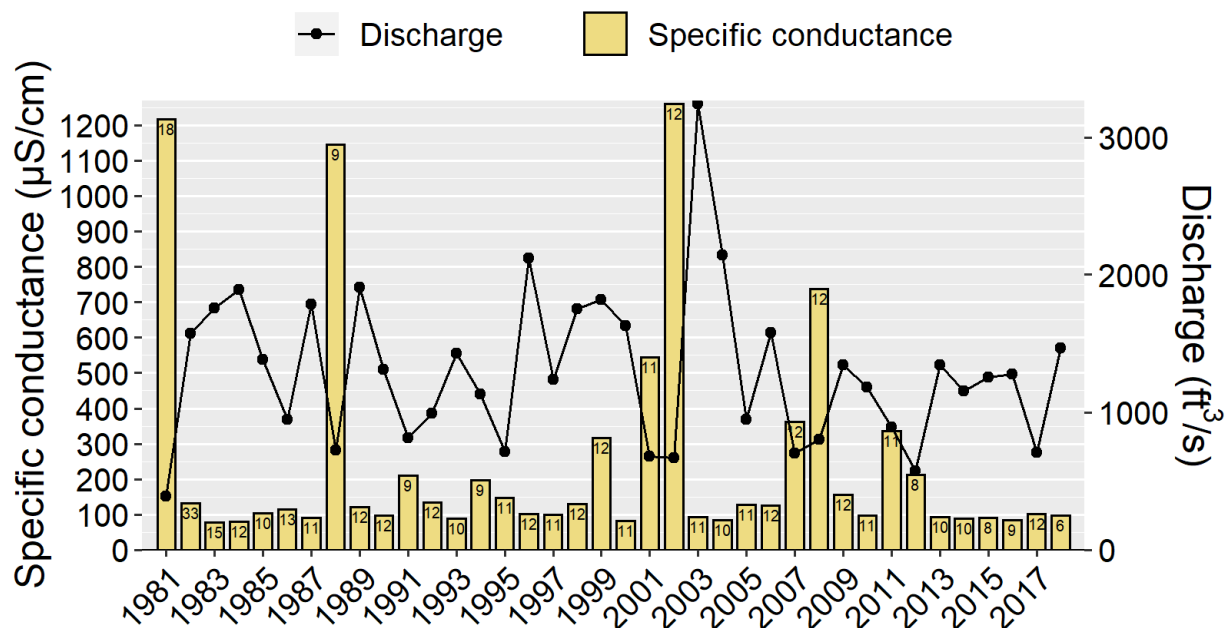
D8356200

Yearly Average Values



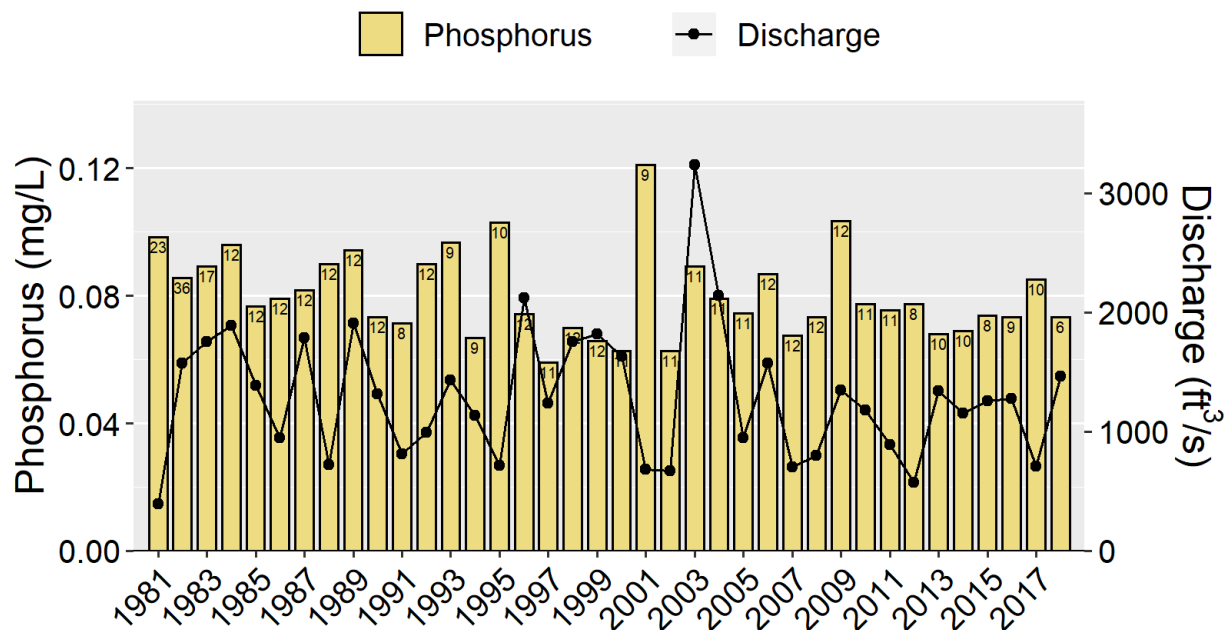
D8356200

Yearly Average Values



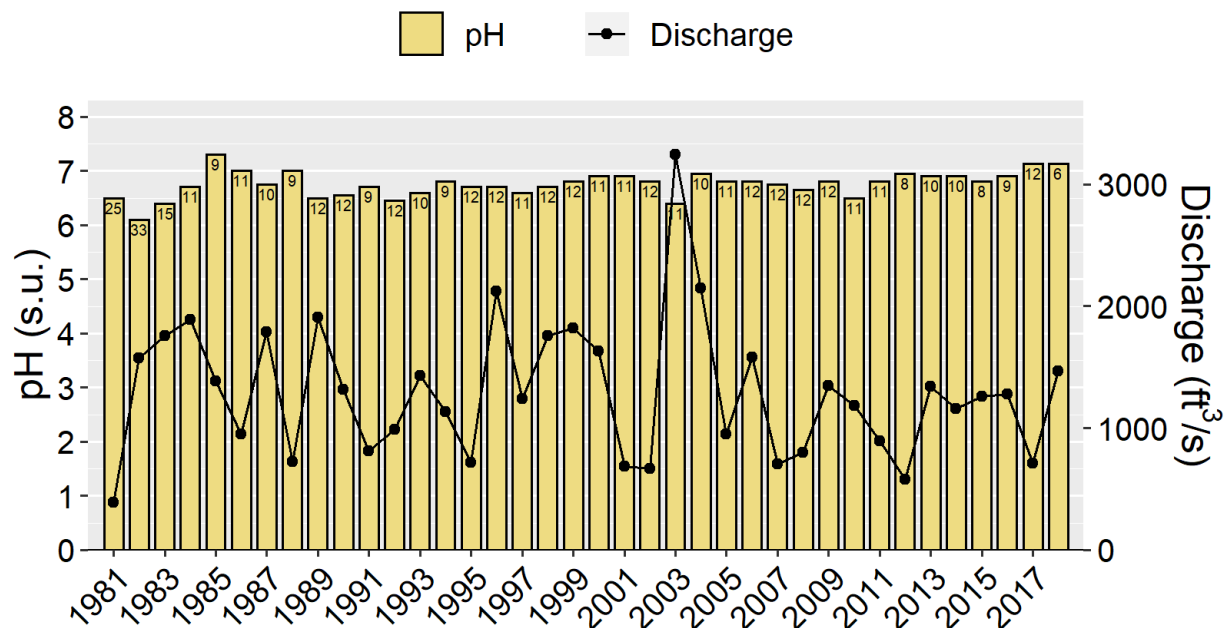
D8356200

Yearly Average Values



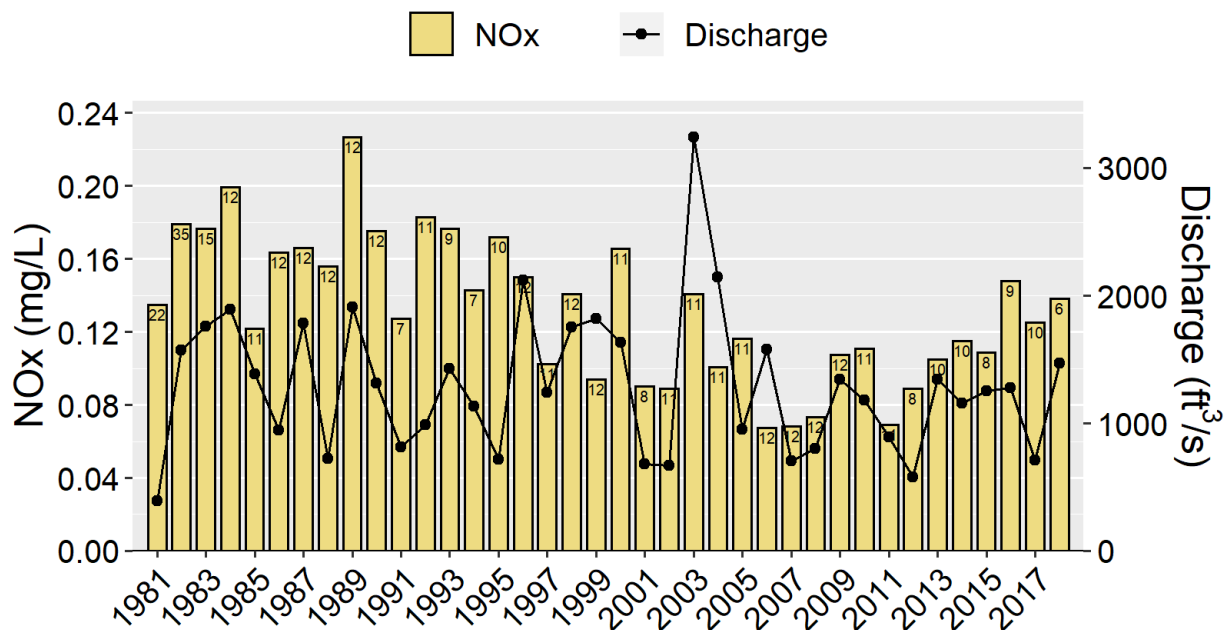
D8356200

Yearly Median Values



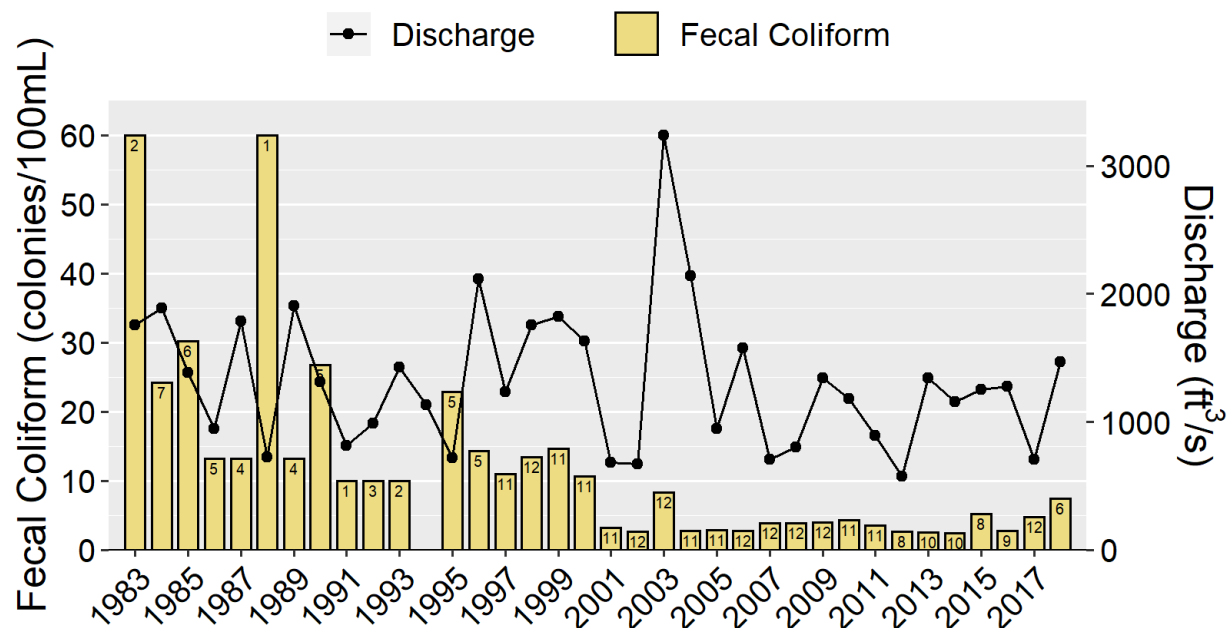
D8356200

Yearly Average Values



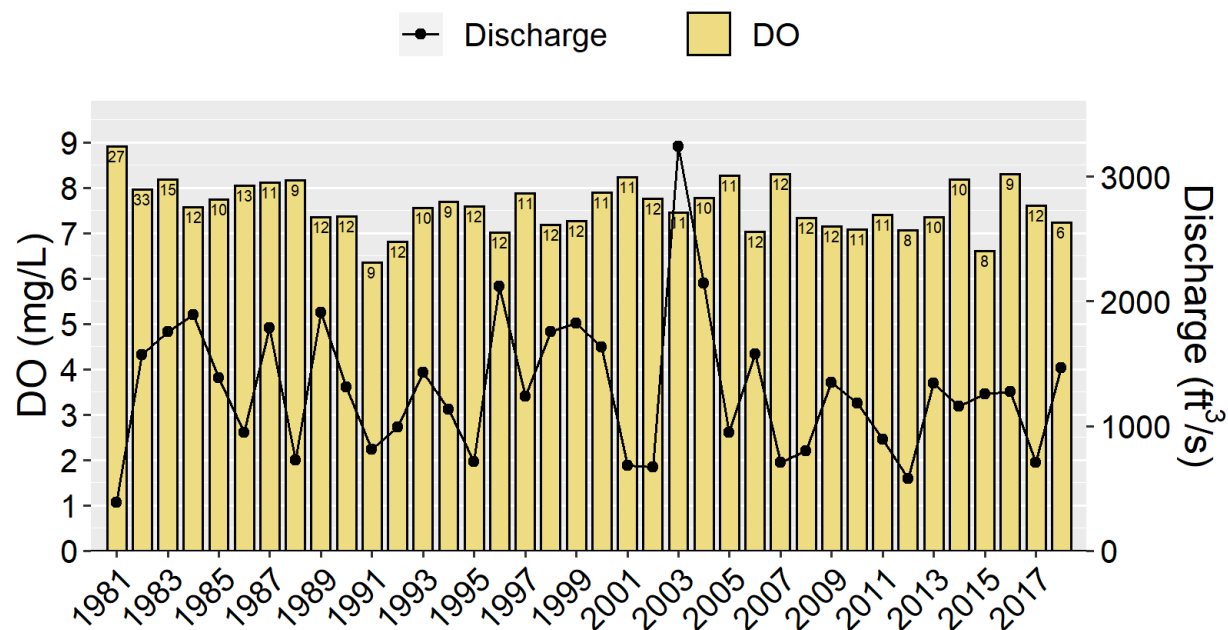
D8356200

Yearly Geometric Mean Values



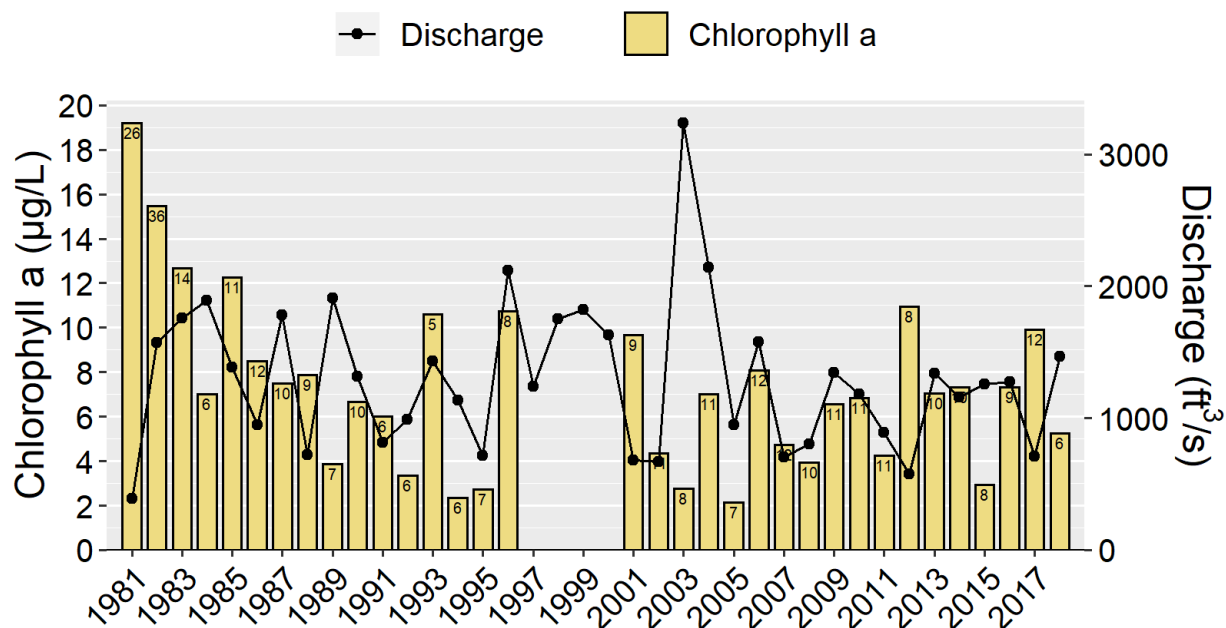
D8356200

Yearly Average Values



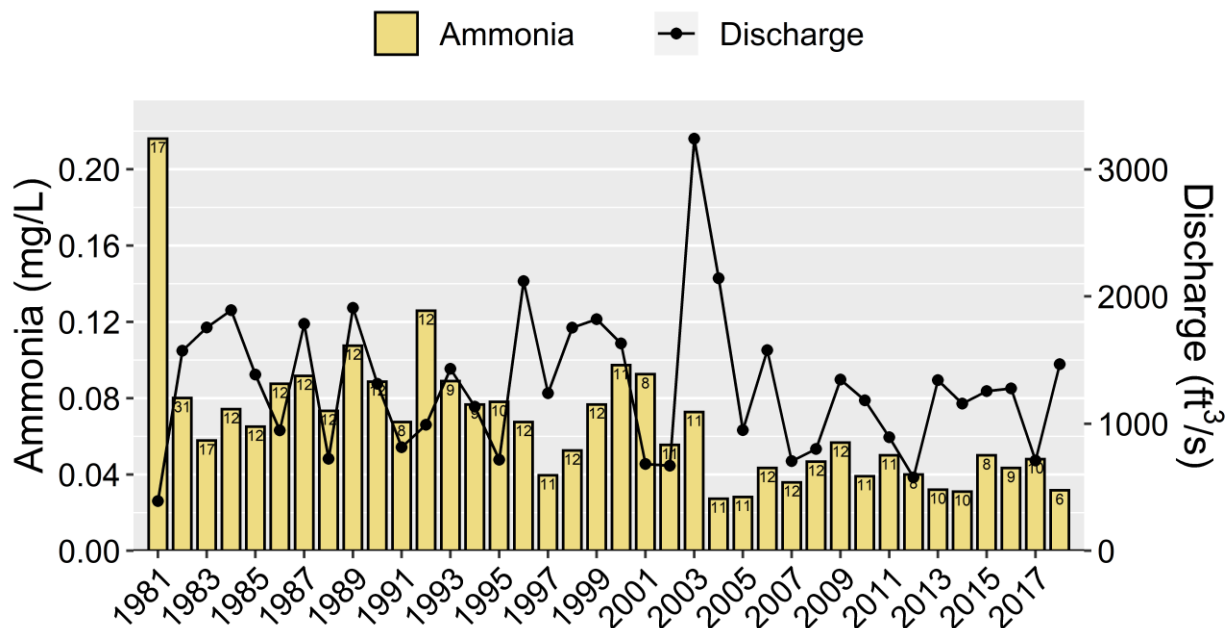
D8356200

Yearly Average Values



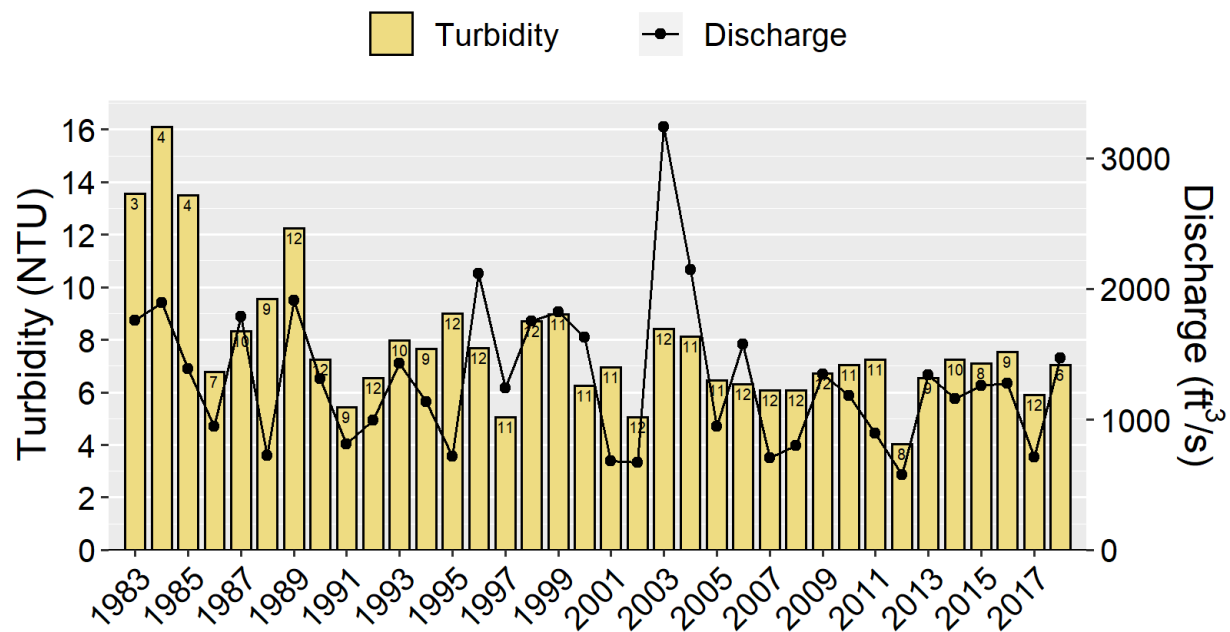
D8356200

Yearly Average Values



D8356200

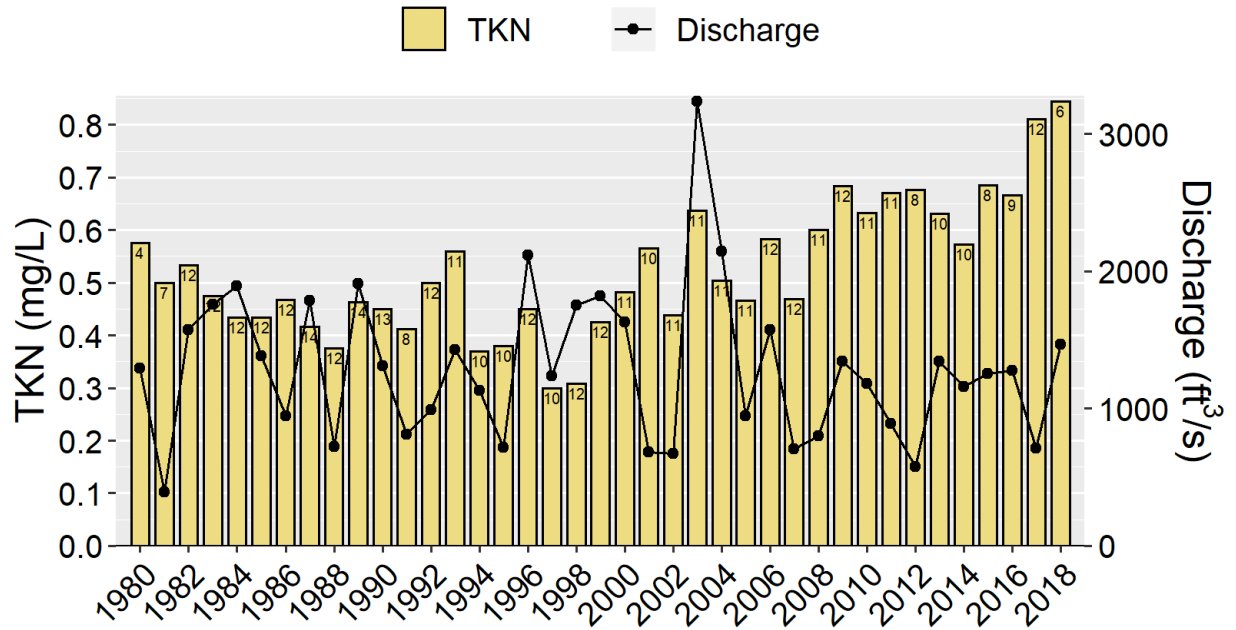
Yearly Average Values



CHOWAN RIVER AT CHANNEL MARKER 7 AT COLERAIN Ambient Monitoring Station Water Quality Data with the Number of Samples Collected inside the Bar, Annual Weighted Means, and Annual Median values with the Nottoway River Discharge (USGS Gage: 02047000).

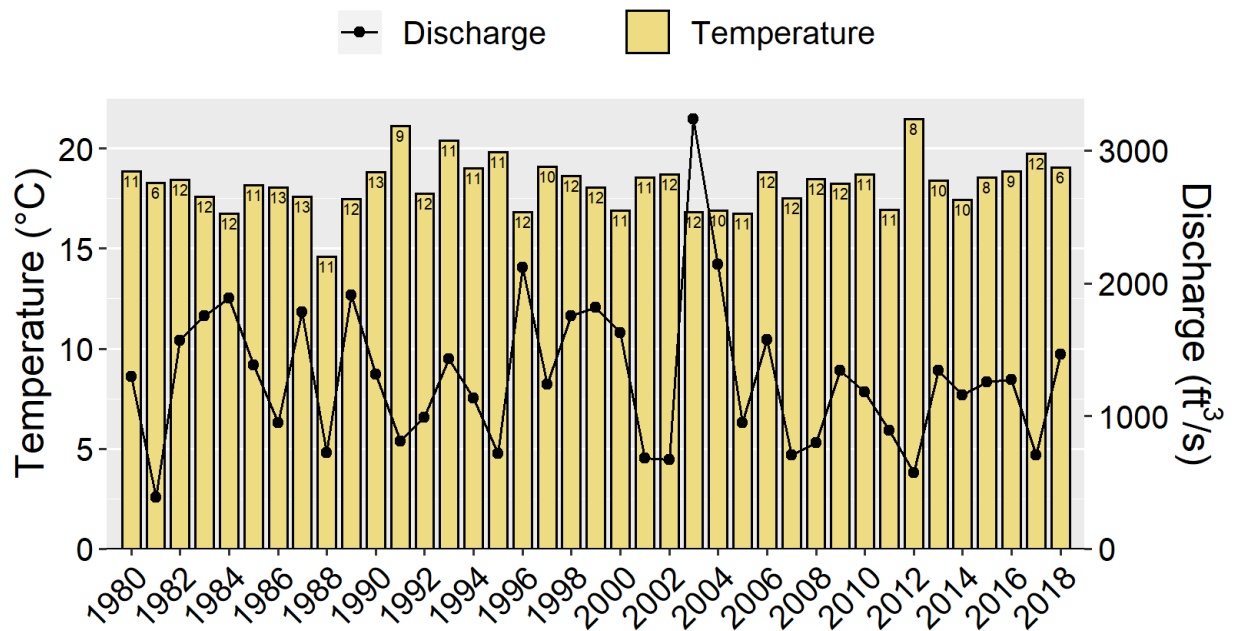
D8950000

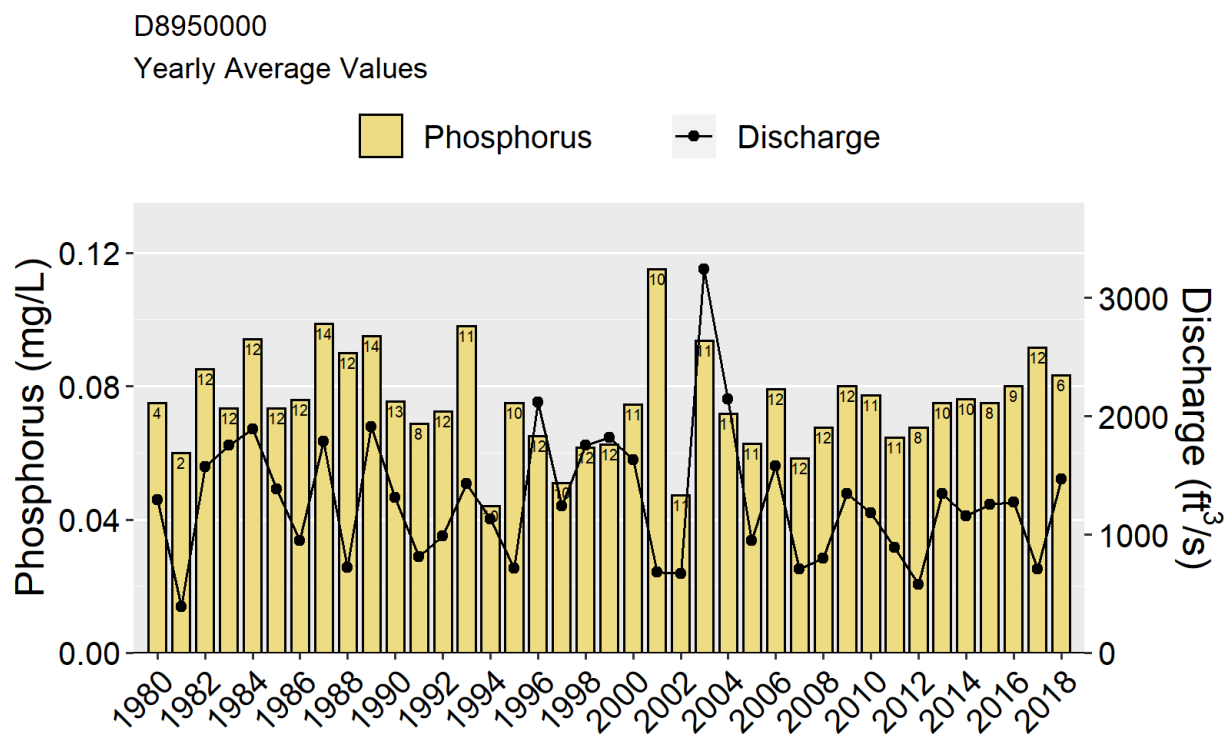
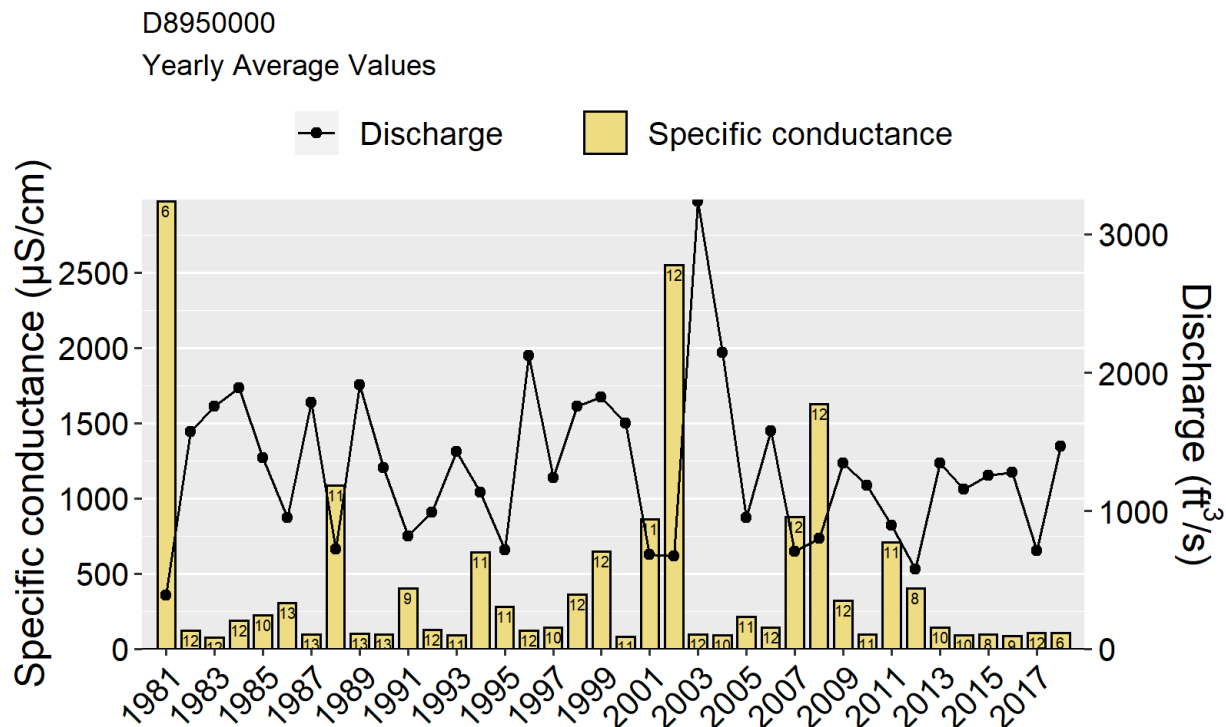
Yearly Average Values



D8950000

Yearly Average Values

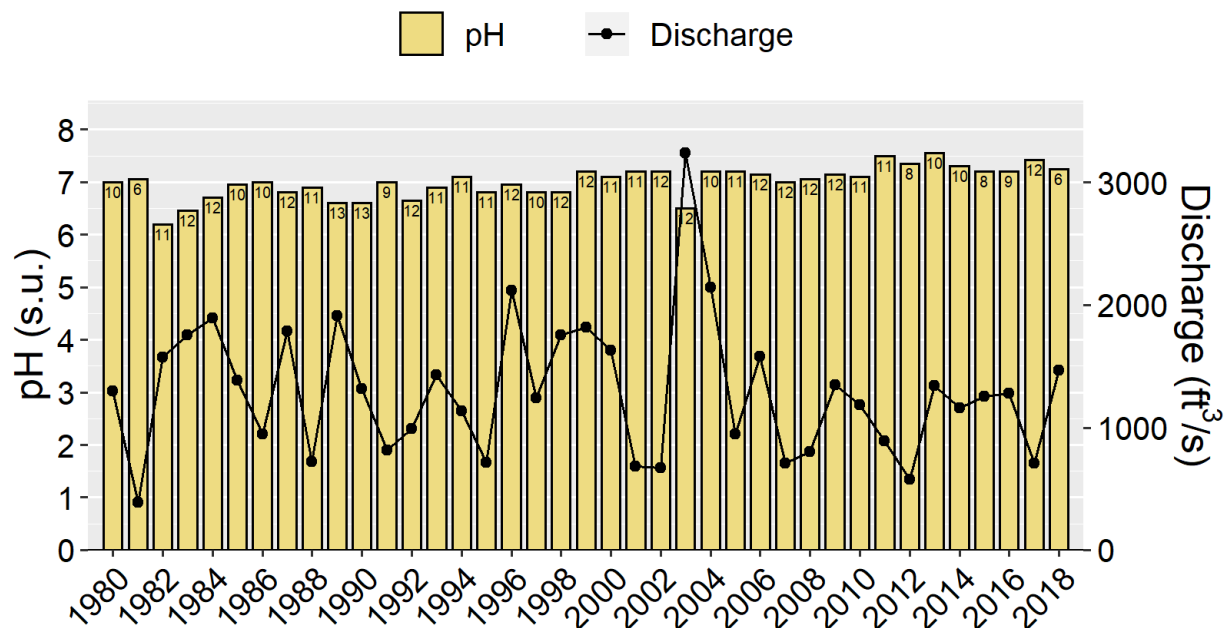






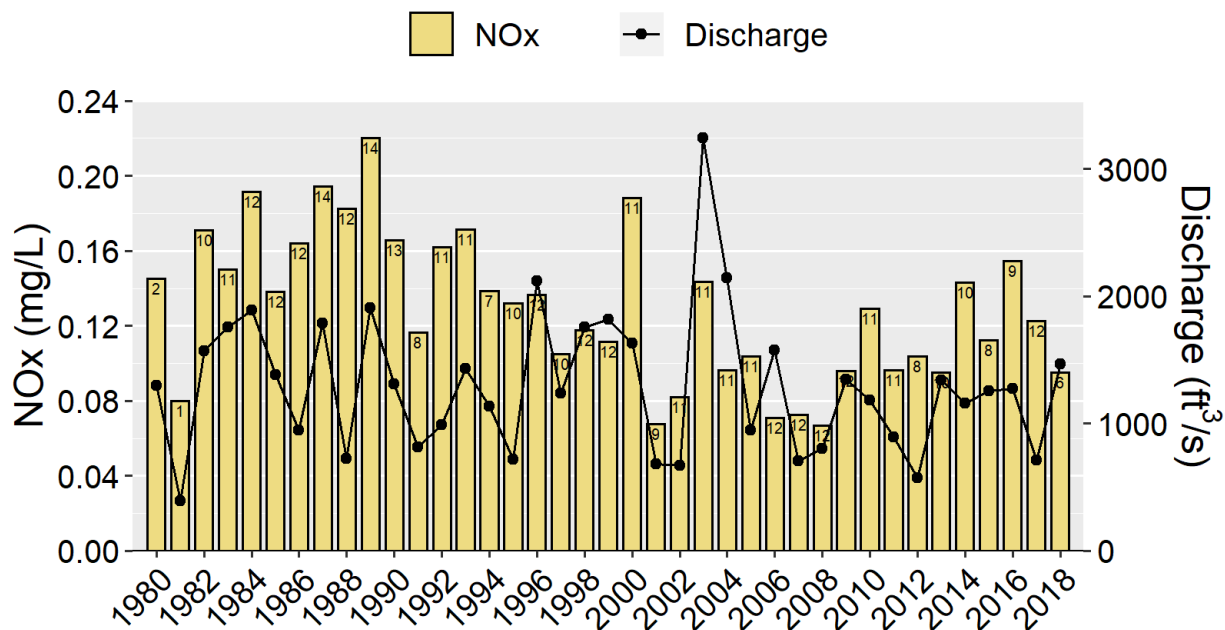
D8950000

Yearly Median Values



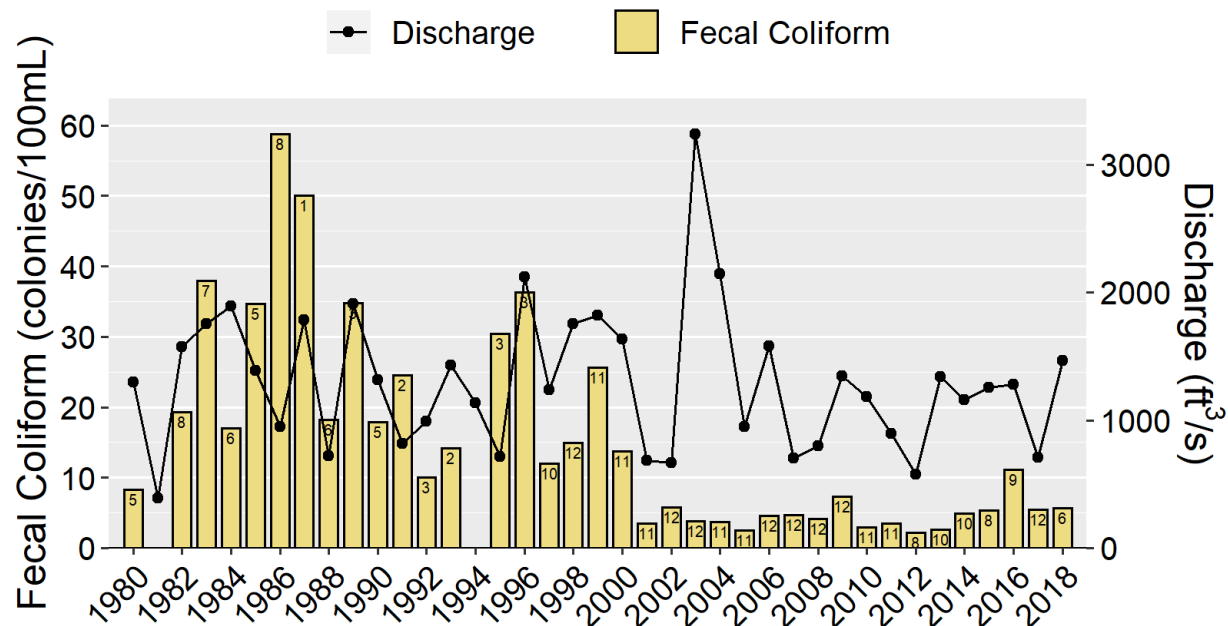
D8950000

Yearly Average Values



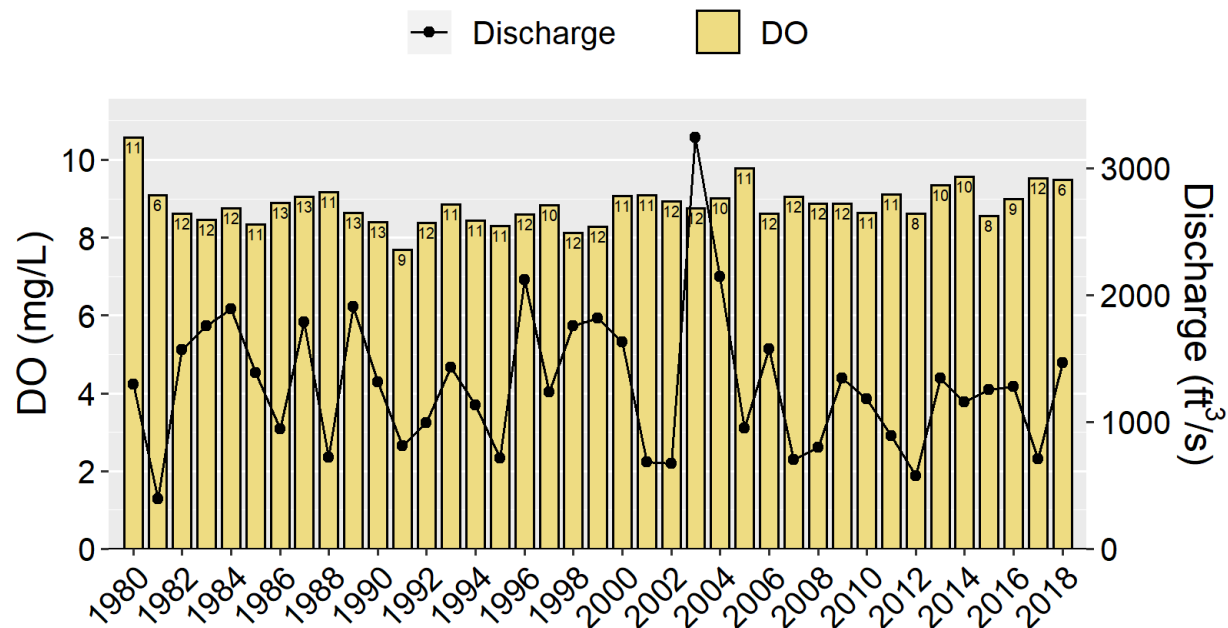
D8950000

Yearly Geometric Mean Values



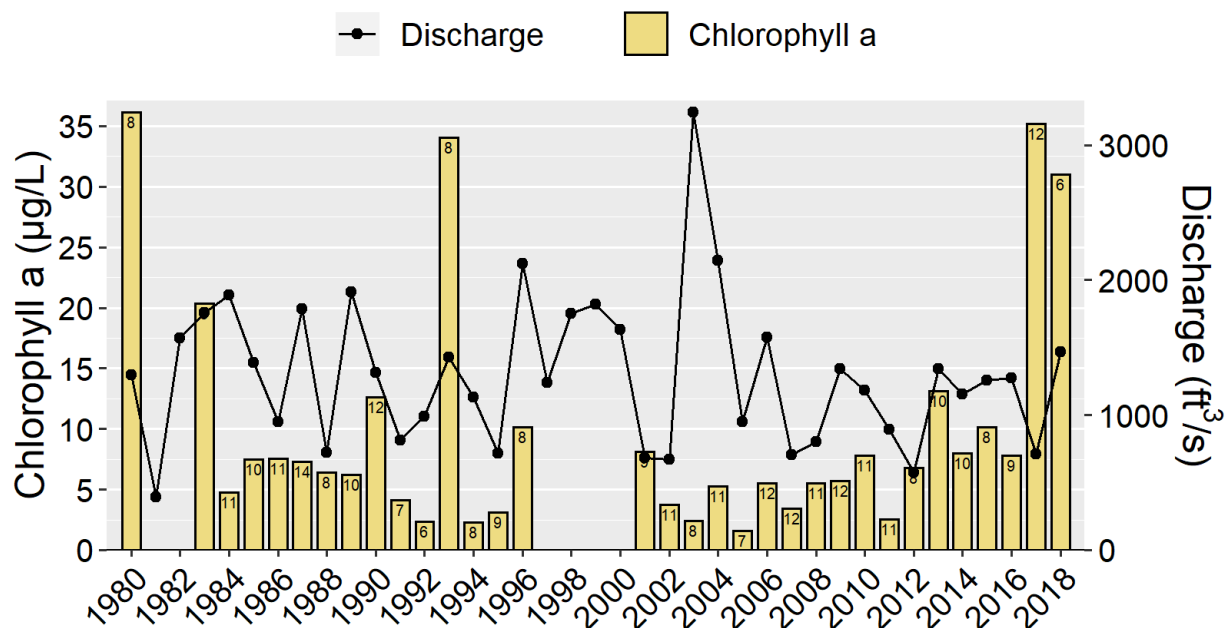
D8950000

Yearly Average Values



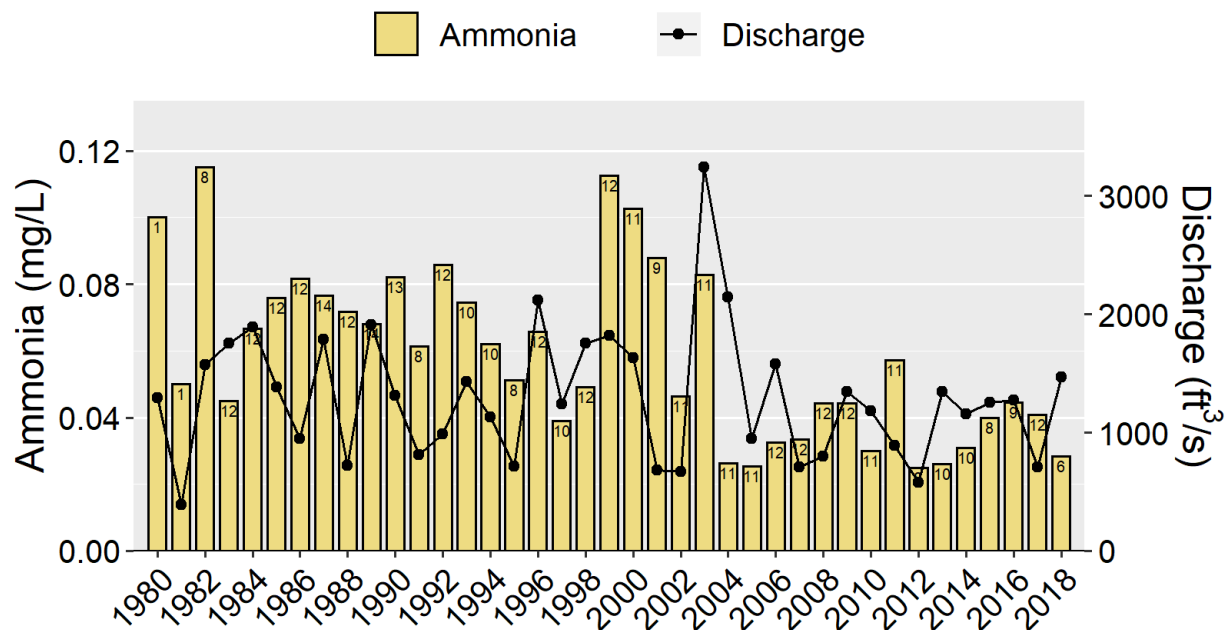
D8950000

Yearly Average Values



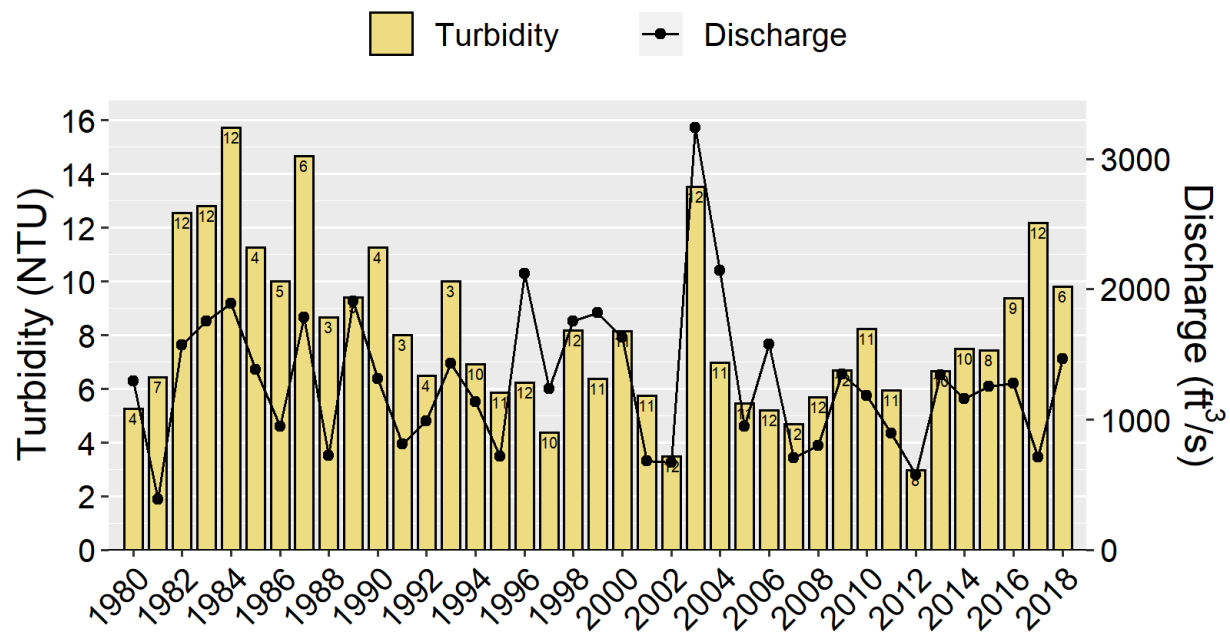
D8950000

Yearly Average Values



D8950000

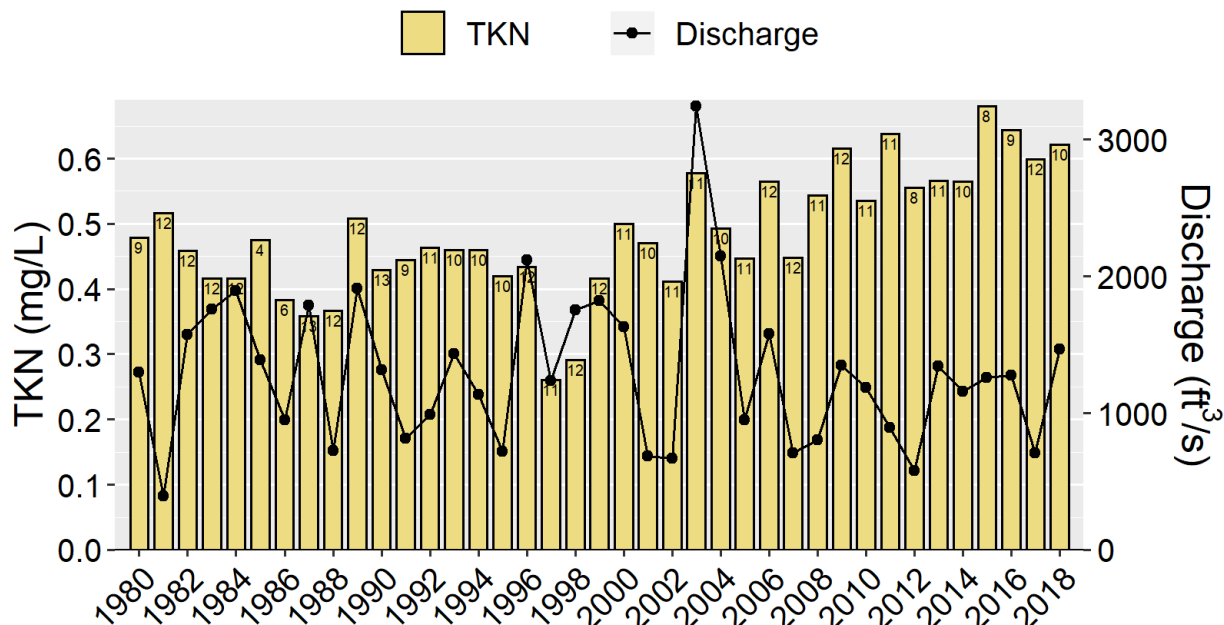
Yearly Average Values



CHOWAN RIVER AT US 17 AT EDENHOUSE Ambient Monitoring Station Water Quality Data with the Number of Samples Collected inside the Bar, Annual Weighted Means, and Annual Median values with the Nottoway River Discharge (USGS Gage: 02047000).

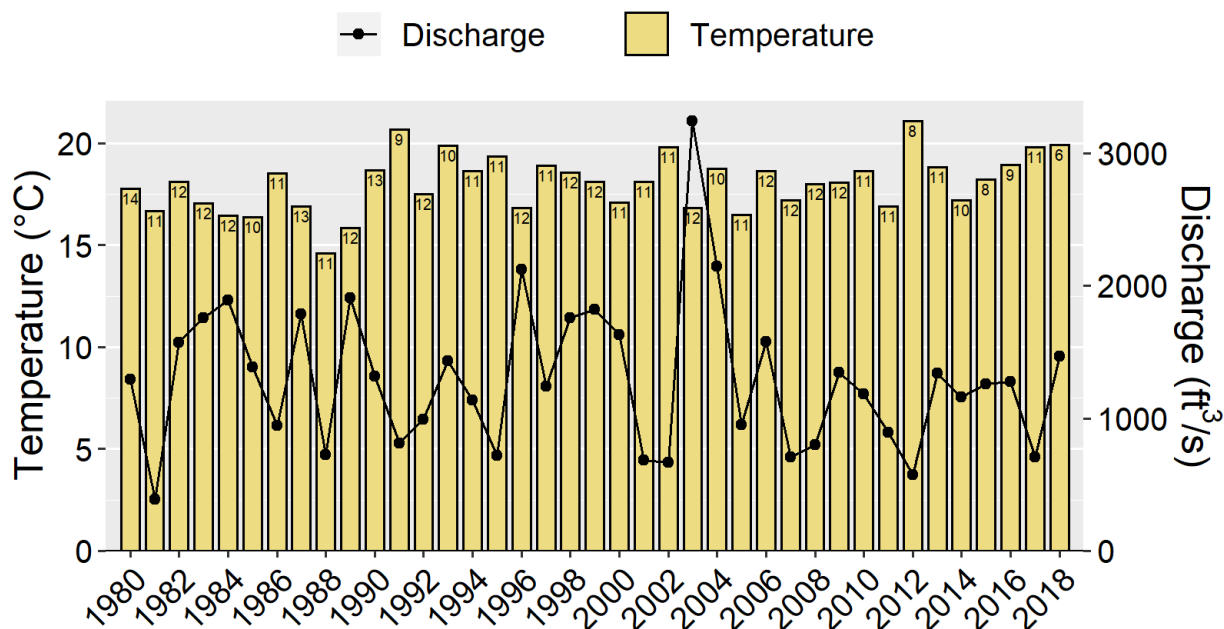
D9490000

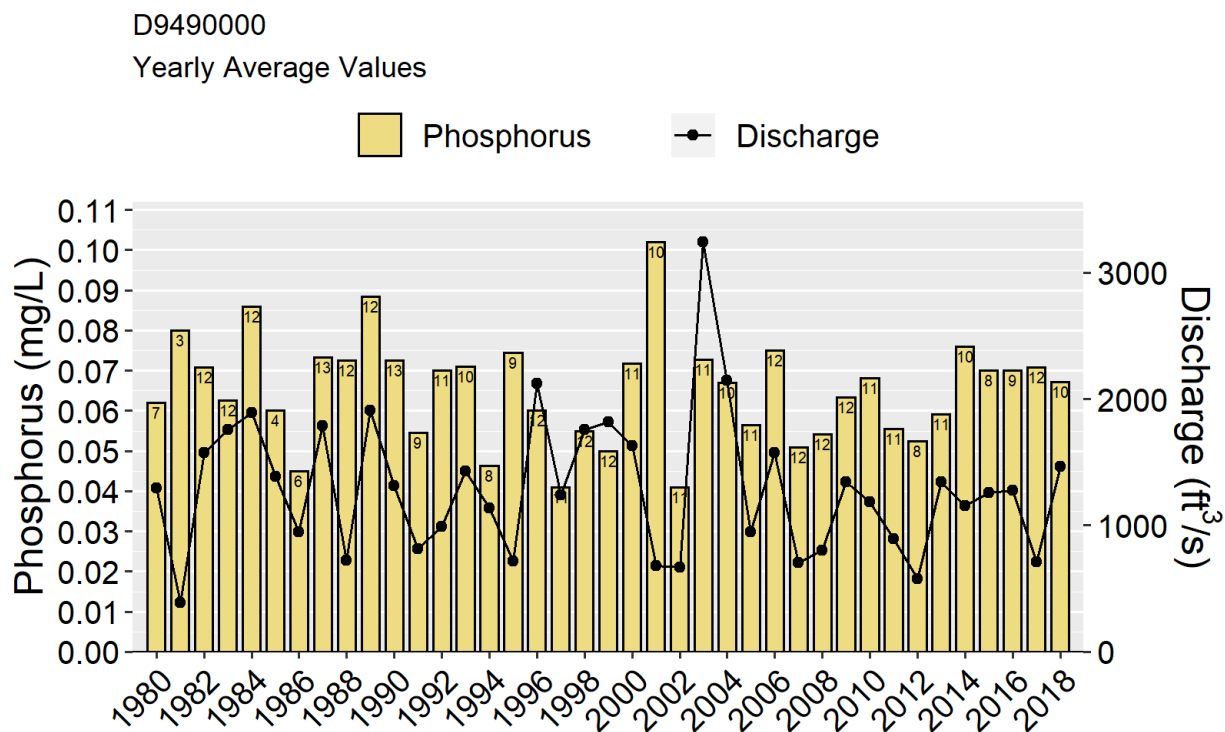
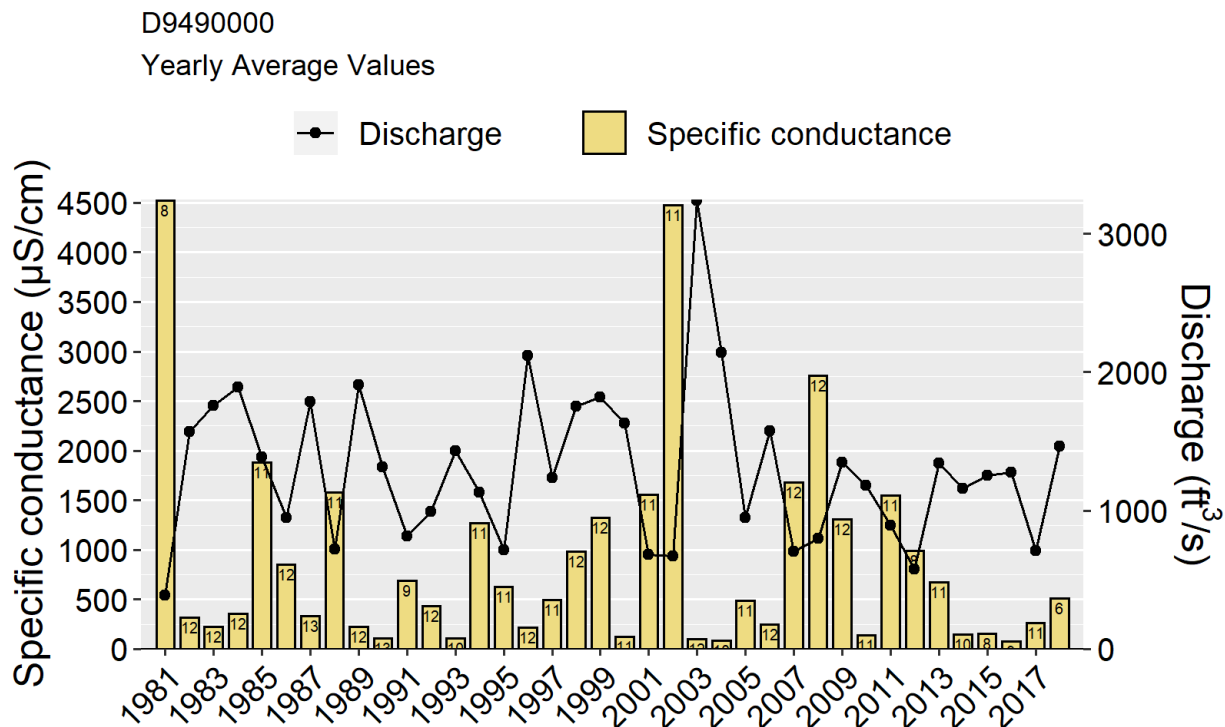
Yearly Average Values



D9490000

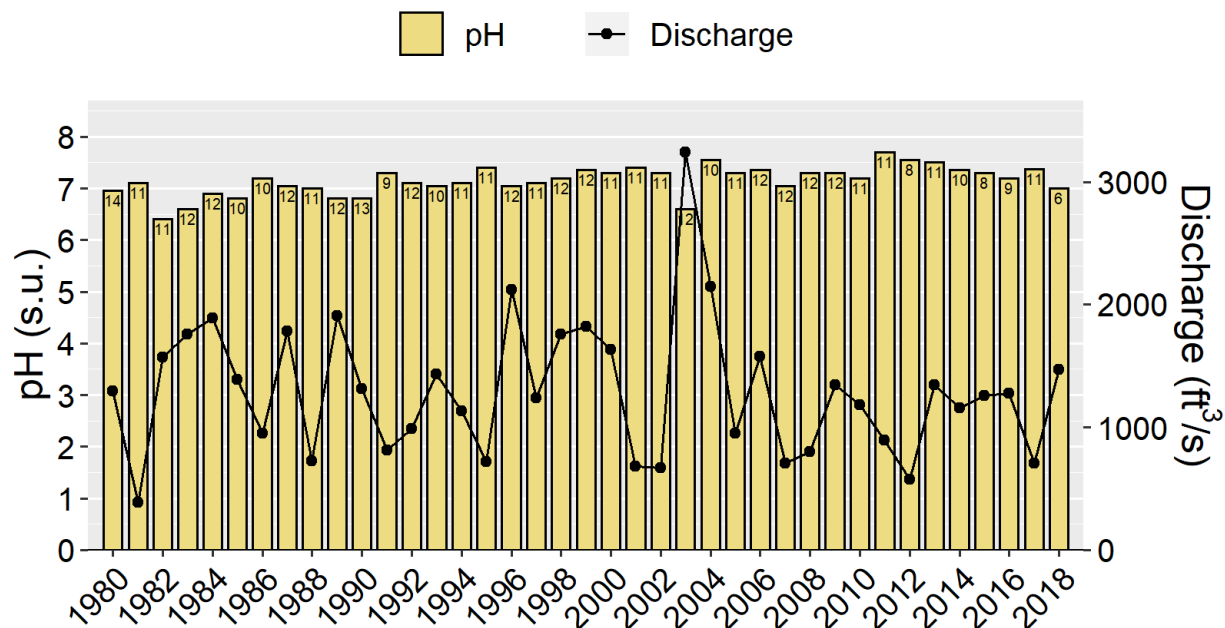
Yearly Average Values





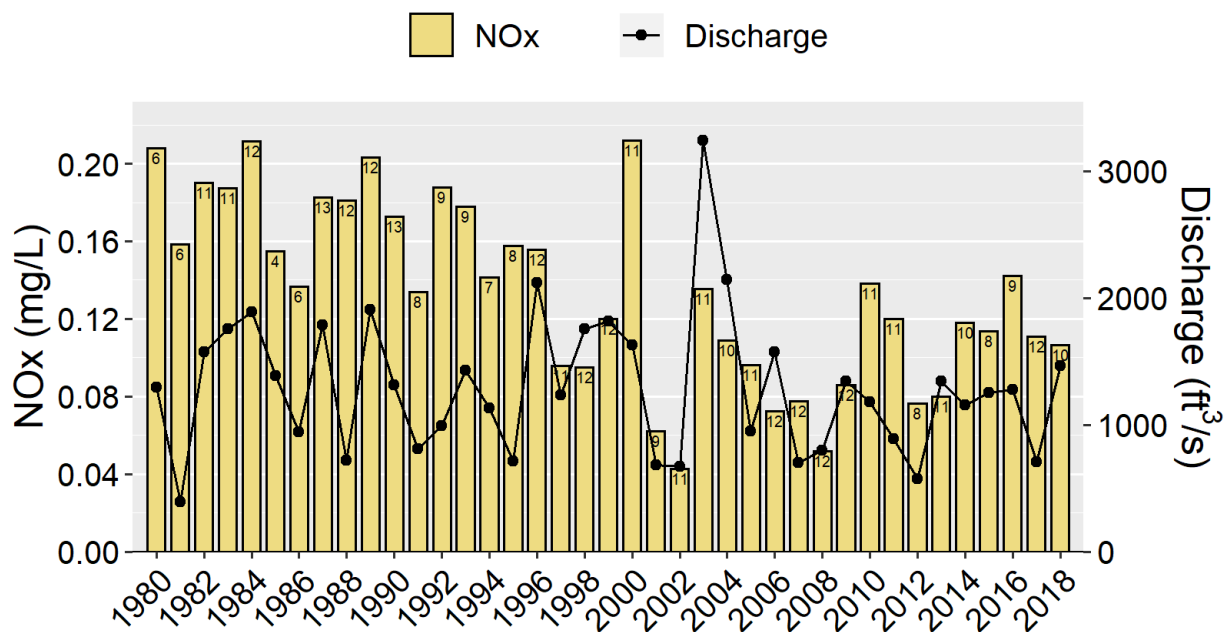
D9490000

Yearly Median Values



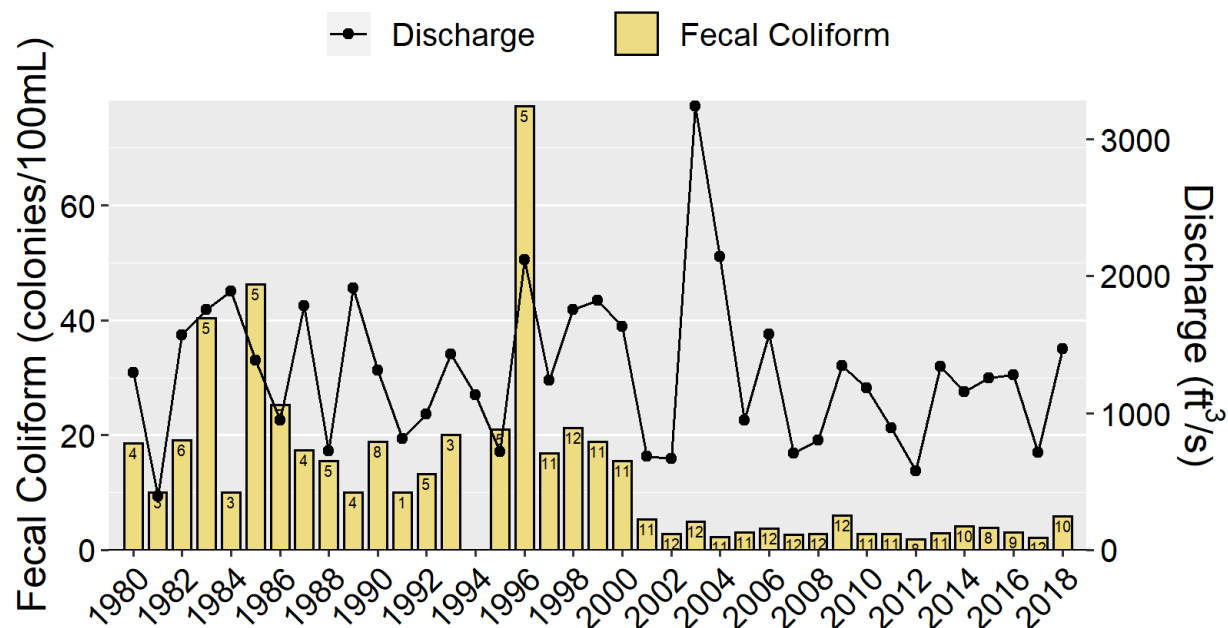
D9490000

Yearly Average Values



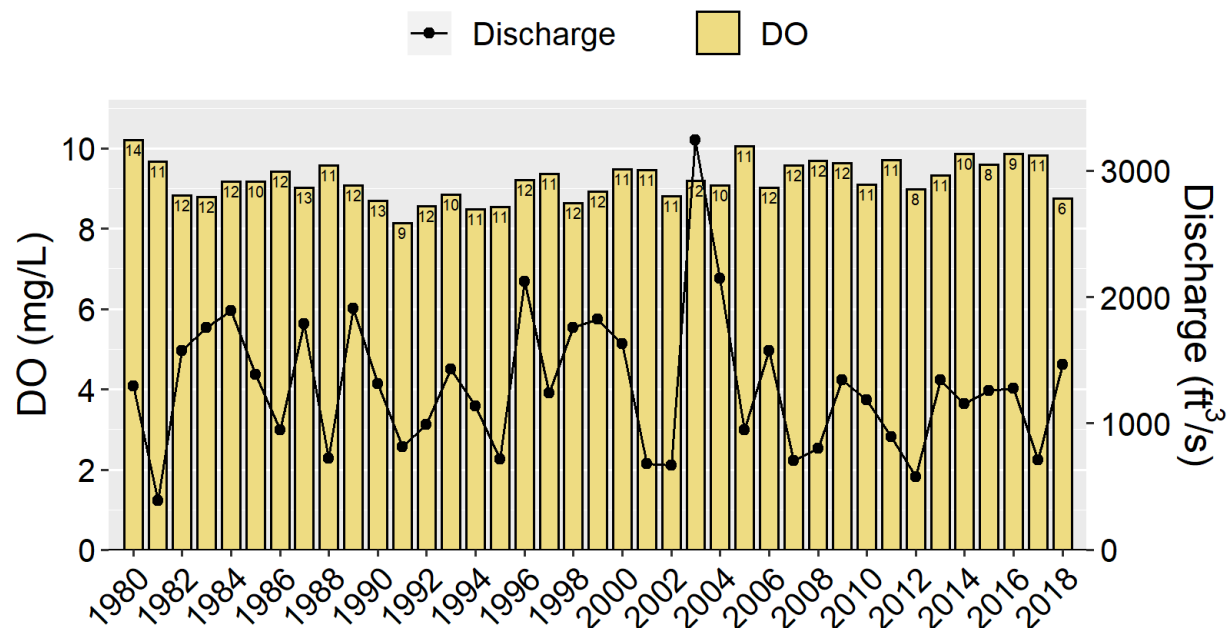
D9490000

Yearly Geometric Mean Values



D9490000

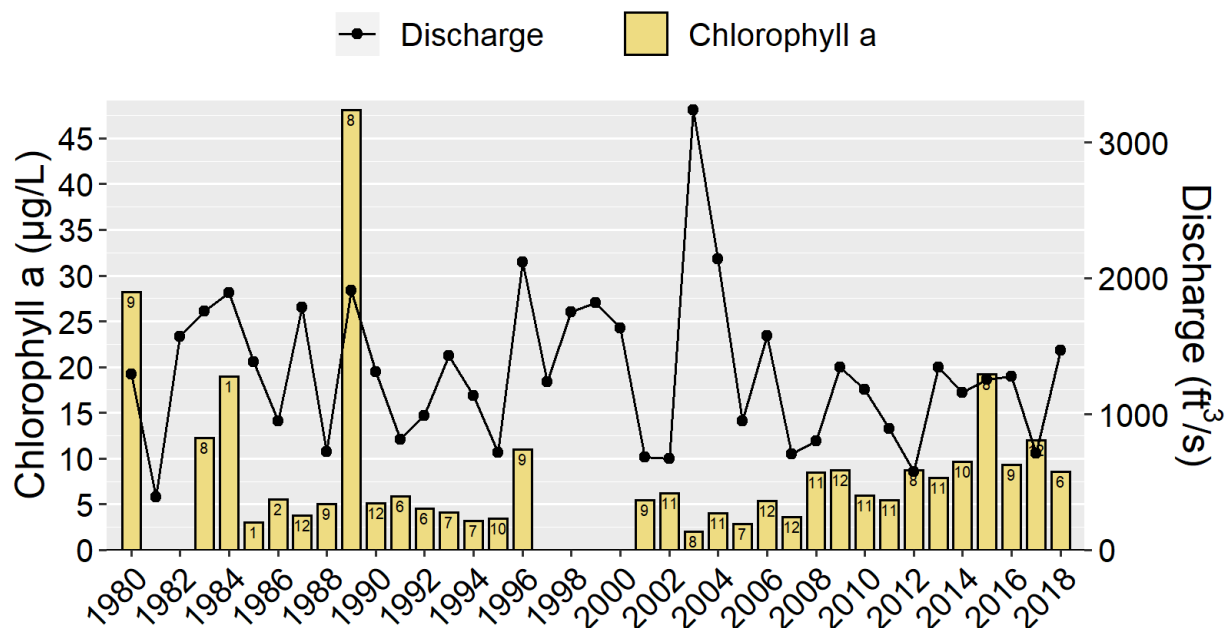
Yearly Average Values





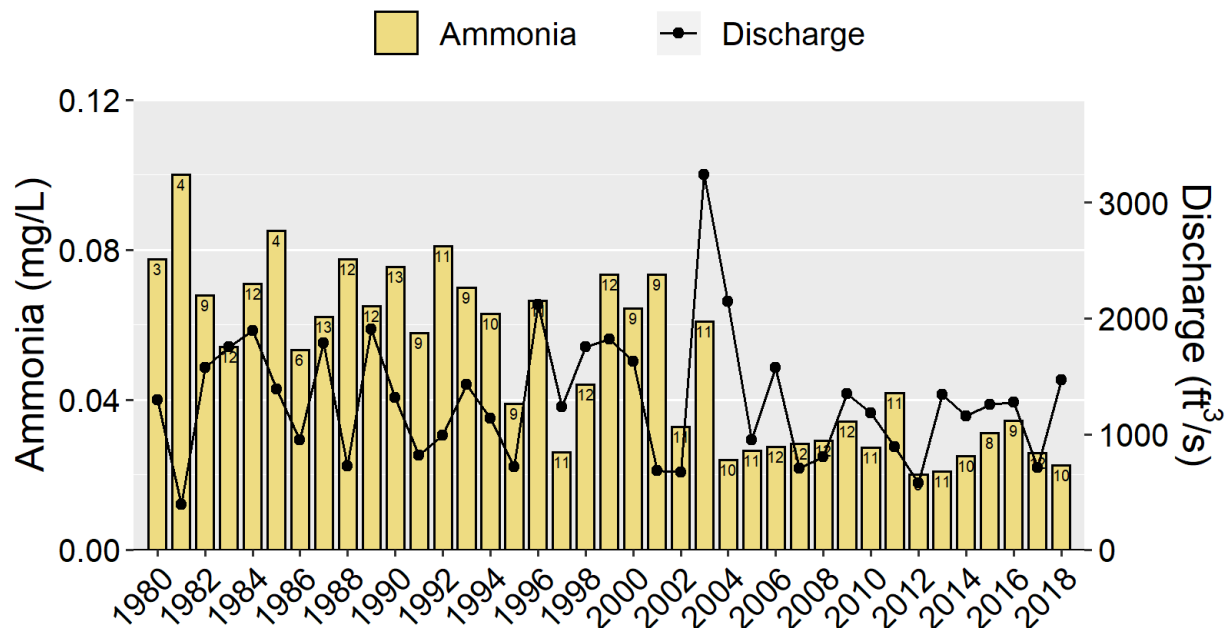
D9490000

Yearly Average Values



D9490000

Yearly Average Values



D9490000

Yearly Average Values

